INVESTIGATING THE INFLUENCE OF LITERACY COACHING AS EMBEDDED PD ON TEACHER INSTRUCTION

by

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ABSTRACT

KATHERINE JEAN MAUZY. Investigating the influence of literacy coaching as embedded PD on teacher instruction (Under the direction of DR. ERIN WASHBURN)

Improving elementary student reading achievement has been a well-defined goal of many federal and state educational initiatives over the last several decades. To that end, vast amounts of resources have been funneled into professional development for literacy teachers to solve the problem of students who are unable to read proficiently on grade level through a focus on improving teacher literacy instruction. The employment of literacy coaches into elementary schools has been an embedded professional development strategy implemented to combat these low literacy achievement rates across the country. However, the effectiveness of literacy coaches in positively influencing teacher instruction has not been rigorously investigated and many questions still remain about their true impact of improving student reading achievement.

This qualitative case study examined how teachers perceive a change in their instructional beliefs and practices through intervention with a literacy coach and which factors of coaching teachers report as most influential on their classroom practice. The implications of coach/teacher interplay were investigated through the entrenched professional development experiences of three elementary literacy teachers and their school-based literacy coach to determine the specific strategies, conversations, and interventions that brought about a possible change in teacher beliefs and practices relating to the teaching of literacy in their classrooms. A within-case analysis revealed changes in teacher beliefs and practices surrounding small group reading activities including phonics integration as well as changes in whole group phonemic awareness (PA) instruction. A cross-case analysis uncovered meaningful themes highlighting coach proximity to practice including shared responsibility, the coach as a sounding board, and scaffolding coaching cycles. Detailed results combined with recommendations for future

research work to advance the field in an effort to develop an effective model of literacy coaching

implementation.

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DEDICATION

This is dedicated to my wonderful family who are the reason that I do everything that I do. To my true partner in life, my husband Ron, who is my biggest supporter and the one who always knows I will be successful before I know it. You have always accepted me for who I am and loved me unconditionally, and for that I am eternally grateful. To our three smart, funny, and loving children, Michael, Heather, and Megan, wanting to be a role model for you has always pushed me to do and be more and you raise me to new heights through your love and continual support. We are so proud of all that you do and our greatest joy while watching you learn and grow is the love and care that you have for us and each other. To our smart, kind, and lovable grandson Corbin, we never knew that being grandparents could be so fun! We are so proud of the things that you do and are excited to see what your bright future holds. My life with all of you is better than I ever could have dreamed possible. You are my life and I love you all.

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CHAPTER 1: INTRODUCTION

Elementary teachers have the extraordinary responsibility of teaching children to read and write (Moats, 2020). Exemplary literacy teachers are able to support students to achieve ambitious content standards while adjusting their instruction to meet the unique needs of each of their literacy learners and navigate external stressors such as large class sizes and supporting student mental health and well-being (Shernoff et al., 2017). In fact, many scholars have suggested that nothing can replace the power of a high-quality literacy teacher during a child's formative years and that teacher quality surpasses class size, school context, and other related variables (National Institute of Child Health and Human Development Early Child Care Research Network, 2002; Neuman & Cunningham, 2009; Stephens et al., 2011).

In fact, student literacy achievement has been associated with the quality of literacy instruction with students making greater academic gains when teachers have a strong knowledge base and solid instructional skills (Elish-Piper & L'Allier, 2011; Goodnight et al., 2019; Piasta et al., 2009). Over the past three decades, several federal and state level initiatives aimed at supporting and improving the knowledge base of elementary literacy teachers have been enacted.

As such, effective teachers of early literacy need knowledge of foundational reading skills necessary for long-term reading development and the capacity to provide explicit, systematic literacy instruction for all students (Cohen et al., 2017; Goodnight et al., 2019; Hudson et al., 2021; Moats, 2009; Neuman et al., 2009). Specifically, literacy teacher knowledge of the five pillars of quality reading instruction (phonemic awareness, phonics, fluency, comprehension, and vocabulary) and the ability to effectively teach students in these areas is imperative to raising the reading achievement of students (Elish-Piper & L'Allier, 2011; Goodnight et al., 2019; Moats, 1999; Walpole et al., 2010).

Improving the reading achievement of elementary students has been a stated goal of the United States federal government for at least 20 years with initiatives geared towards increasing the knowledge of evidence-based practices in reading instruction and improving the instructional practices for teachers of reading (Borko, 2004; Garet et al., 2001; Penuel et al., 2007). For example, in 2000, the *Report of the National Reading Panel: Report of the Subgroups* provided detailed research expressing that quality reading instruction provides opportunities for students to receive explicit instruction in phonemic awareness, systematic phonics instruction, methods to improve fluency, and strategies to enhance reading comprehension (NICHD, 2019). Despite the highly detailed explanations of these important pillars in reading instruction and the importance of their inclusion in effective classroom practices, the research is much less clear on how new and established teachers should be trained to deliver the literacy instruction.

While the National Reading Panel focused on the "whats" of literacy instruction, the reauthorization of the Elementary and Secondary Education Act of 1965 (ESEA) as the No Child Left Behind Act of 2001 (NCLB) focused heavily on closing student achievement gaps with an accountability component requiring students to make Adequate Yearly Progress (AYP) as measured on state performance tests (Green et al., 2021). To that end, the NCLB Act required that all teachers be "highly qualified" and mandated that states ensure the availability of "high quality" professional development (PD) for teachers (Borko, 2004; Elish-Piper & L'Allier, 2011). However, the standard for a "highly qualified" rating in the mandate was limited to simply obtaining full state certification and passing the state teacher licensing examination without regard to the ability of the teacher to apply that knowledge effectively with students (Borko, 2004; Elish-Piper et al., 2011; Green et al., 2021; Piasta et al., 2009). In addition, Reading First legislation was formulated under NCLB and mandated that schools be held

accountable for ensuring that all students "read well by the end of third grade so they are well prepared to achieve their full academic potential" (Theodore, 2008, p.1). This mandate was reinforced through funding of reading programs considered to be grounded in scientific research, despite a great deal of debate over the term "scientifically based research," and how that specifically translated into the development and implementation of literacy practices for the classroom. An important aspect to the Reading First initiative was a major spotlight on PD for K-3 teachers related to research-based reading instruction with the expectation of the use of literacy coaches to provide this ongoing professional development in a job-embedded format (Elish-Piper & L'Allier, 2011). This led to an influx of literacy coaches into elementary schools across the country with many schools without Reading First funding hiring coaches due to the promise of literacy coaching to improve teacher quality and student reading achievement (Bean et al., 2010; Elish-Piper & L'Allier, 2011).

While Reading First legislation was eventually repealed with the reauthorization of NCLB to the Every Student Succeeds Act (ESSA) in 2015, the use of literacy coaches has persisted despite a lack of conclusive research into the relationship between literacy coaching and student reading performance (Elish-Piper & L'Allier, 2011; Poiner, 2016). In fact, ESSA specifically allows for the use of federal funds for ongoing job-embedded PD for teachers and encourages opportunities for effective teachers to lead PD for their peers. However, the content of literacy teacher PD and the interactions of coaches during the process continue to be extremely varied with no specific, uniform guidance on the coaching interventions that bring about changes in classroom instructional practices and increased reading achievement (Matsumura et al., 2010; Shernoff et al., 2017).

Despite these federal educational initiatives progressively more focused on improving student performance through enhancement of teacher practice, student reading achievement, according to the most recent Nation's Report Card (National Assessment of Educational Progress (NAEP, 2019), remains low. Specifically, only 26 percent of fourth-grade students performed at the Proficient level on the reading assessment in 2019, while nine percent of fourth graders performed at the Advanced level. Thus, 31 percent of fourth-grade students performed at only the Basic level, exhibiting the ability to make only simple inferences about characters, events, plot, and setting, while 34 percent were even lower at the Below Basic level. While the appropriateness of what is considered proficient can be argued, the goal of supporting children as they develop into mature readers with the skills necessary to navigate through a highly literate world continues to dominate the efforts of school systems nationwide. Early intervention is essential to preparing students to acquire the foundational skills necessary to develop into accomplished readers (Elish-Piper et al., 2011).

Therefore, reading instruction in kindergarten through third grade classrooms must be of the highest quality in order to prepare students to read, analyze, and interpret text on at least a proficient level by the end of third grade (Elish-Piper et al., 2011; Tadpole et al., 2010). To that end, the knowledge base and the instructional expertise of literacy teachers must be strengthened in order to shape appropriate classroom literacy experiences that build strong reading and writing development in students (Matsumura, 2013).

A Need for Knowledgeable Elementary Literacy Teachers

Effective teachers of early literacy need knowledge of foundational reading skills necessary for long-term reading development (phonemic awareness, phonics, fluency, comprehension, and vocabulary) and the capacity to provide explicit, systematic literacy

instruction for all students (Goodnight et al., 2019; Moats, 2009). Through the science of reading, a vast, interdisciplinary body of scientifically-based research, much is known about how reading and writing develop, what skills are involved in the processes, how they work together, and which parts of the brain are responsible for reading development (Defining Movement, 2021; Ordetx, 2021; Petscher et al., 2021). However, explicit instruction supporting this knowledge often is not taught consistently in general education classrooms with teachers feeling inadequately prepared to meet the challenges of providing this essential instruction for students. Many teachers express a continued lack of understanding of how language is structured in spoken and written form, how children develop reading skill, and the established principles of effective reading instruction (Goodnight et al., 2019; Moats, 1999). Further, novice teachers often report a lack of knowledge related to implementation of a given concept with students despite possibly possessing awareness of the skills necessary for successful reading acquisition (e.g., Hudson et al., 2021). The majority of available learning experiences for teachers continue to focus on technical knowledge versus the pedagogical and situational knowledge that would guide reading instructors towards implementing the concepts with students and applying them with diverse learners displaying varying needs (Cohen et al., 2017; Tortorelli et al., 2021).

PD sessions with technical training and supported practice continue to be underutilized despite findings that this method produces large effects on teachers' knowledge of content and pedagogy (Darling-Hammond et al., 2011; Hudson et al., 2021). This lack of teacher efficacy in the content and implementation of literacy may play a role in preventing students from receiving quality reading instruction that would enable them to become proficient readers despite decades of federal initiatives aimed at improving students' reading achievement.

Improving Teacher Literacy Instruction Through Professional Development

Professional development has long been used across various fields as a way to develop and maintain expertise and competency in a specific area, including literacy teaching (Desimone et al., 2002). This continual enhancement of skills is an essential component of any profession (Boyle et al., 2007; Garet et al., 2001) and can take many shapes such as workshops, local and national conferences, college courses, and special institutes designed to cultivate and advance professional competence (Desimone, 2009). Although high-quality programs that produce systematic improvements have proven difficult to develop, scale, and sustain, a strong belief in the potential of PD to generate systematic reform designed to increase professional capacity continues to drive investments in PD opportunities (Gore et al., 2021; Kraft & Blazar, 2017; Kraft et al., 2018).

PD to foster improvements in literacy teaching continues to be widely justified by its potential to secure improvements in student reading achievement despite a lack of convergent evidence on the content or the methods most beneficial in teacher PD to ensure the cultivation of high-quality literacy educators (Garet et al., 2001; Gore et al., 2020; Kennedy, 2016; Kraft, 2018; Neuman & Cunningham, 2009; Shernoff, 2016). While there is a proliferation of studies that investigate the connection between teacher beliefs and experiences and the instructional decisions that they make and what they are willing to learn, few studies empirically connect specific learning activities and change in teacher practice (Desimone et al., 2002; Opfer & Pedder, 2011). Nonetheless, there is growing consensus that PD opportunities for literacy teachers shift to developing teachers' capacity to construct knowledge for use in their own contexts with the specialized body of knowledge necessary for effective literacy instruction (Darling-Hammond et al., 2001; Piasta et al., 2009).

Scholars suggest that teachers' code-related knowledge, coupled with expertise in relevant instructional practices, is essential for effective early reading instruction (Piasta et al., 2009; Tortorelli et al., 2021). However, existing studies continue to focus on the technical knowledge that teachers can gain from PD with less research focused on how this knowledge is translated into classroom instruction (Gore et al., 2020; Hudson et al., 2021; Tortorelli et al., 2021). Without this examination of learning during the implementation process, it is difficult to ascertain if teachers sustain initial improvements in content knowledge measured during and immediately after the PD experience and if any changes in instructional practices occur as a result of the learning experience (Hudson et al., 2021). Therefore, a strong foundation built on effective characteristics of PD that promote a focus on both content and classroom implementation should be considered when designing PD for literacy teachers.

Characteristics of Effective Professional Development

Though understanding what makes professional development effective is imperative to making widespread professional advancements, the wide range of experiences that count as PD makes measuring its effectiveness a challenge (Desimone, 2011). However, a core set of six features common to effective professional development have been suggested to have shown success in building knowledge and skill in participants and can be applied directly to PD designed for literacy educators (Desimone et al., 2002; Desimone, 2009; Desimone & Pak, 2017). Recent studies have resulted in a moderate consensus that the general characteristics of effective professional development include: reform type, content focus, active learning, coherence, duration, and collective participation (Carlisle & Berebitsky, 2010; Desimone et al., 2002; Desimone, 2009; Desimone & Pak, 2017; Gore & Rosser, 2020).

Reform type, duration, and collective participation have been identified as "structural features" associated with the format of PD and hypothesized as components effective in improving practices (Desimone et al., 2002; Garet et al., 2001, Penuel et al., 2007). Researchers have found that literacy teachers gain knowledge during active collaboration with other literacy teachers (collective participation) through sustained opportunities to reflect critically on their literacy practices (duration) (Desimone et al., 2002; Garet et al., 2001). Working together, participants construct new knowledge and beliefs about content and pedagogy in an effort to improve literacy instruction for all students (reform type) (Darling-Hammond et al., 2011; Gore et al., 2020).

Characteristics related to the substance of the activity include active learning, coherence, and content focus, and are measured to the extent to which the activity offers those opportunities. Research suggests that literacy teachers learn through hands-on practice of teaching techniques (active learning), with a focus on the components of reading instruction (content focus), and by reflecting on their students and the work that they do in settings that support teacher inquiry. This enables teachers to bridge the gap between theory and accomplished practice (Darling-Hammond et al., 2011; Tortelli et al., 2021). Examples of literacy PD activities of this nature include such things as student data discussions, collaborative planning, co-teaching, and analyzing student work together in an effort to better inform instruction. Further, research has found that literacy teacher specific PD must align with the priorities of the school and teachers (coherence) and be sensitive to changes in teacher knowledge and practice in order to be successful (Gore et al., 2020; Hindman et al., 2020).

These six characteristics of effective professional development are well documented in the literature and suggest that PD is highly effective when participants are actively engaged, for a

sustained amount of time, with people who perform similar work tasks as themselves (Desimone, 2009). Adult participants want to see how the new information fits together with their prior knowledge and require a clear focus on deepening content knowledge and implementation of the content (Carlisle & Berebitsky, 2010; Desimone et al., 2002; Desimone, 2009; Desimone & Pak, 2017; Garet et al., 2001). Despite relative unity in the studies on these critical characteristics of PD, there is limited research on how these attributes relate to and impact each other as well as the influences of emphasizing one characteristic over another when needed by the participants or required by the developers. More research is needed on how best to develop literacy PD experiences with these critical features dispensed and manipulated in the most effective ways possible to bring about the change in practices that is desired following professional development sessions. PD situated within close proximity of the classroom context has been found to ease the translation of knowledge and skills into actual practice (Kraft et al., 2018; Shernoff et al., 2017).

Job Embedded Learning. The early work of Joyce and Showers (1983) recognized the power of PD and the challenges of transferring that knowledge back to the organization of the participants following the training session (Shernoff et al., 2017). Horizontal transfer, in which the skill can be shifted directly from a training session into practice, and vertical transfer that requires possible accommodations, further learning, and practice are components that must be considered when determining and improving the effectiveness of PD activities (Joyce & Showers, 1983). PD offered in the field of teaching regularly requires vertical transfer of skills as the context of the training is often extremely divergent from the classroom setting and teachers must modify the new skills and knowledge to fit the students, instructional content, and objectives of the classroom instruction (Dudek et al., 2019; Joyce & Showers, 1983). This

complicates the transfer of learning from the PD session to application in the classroom as the instructor must learn to apply the new skill within the variations of the classroom context and the students contained within it (Dudek et al., 2019). In fact, teachers report that their struggle is not in learning a new skill but in transferring that knowledge and implementing the skill in their classroom (Dudak et al., 2019; Joyce & Showers, 1982). Therefore, effective PD for educators must contain opportunities for support in order to make this transfer from the training to the classroom possible in the quest to improve student achievement. However, research suggests that quality classroom support following PD is often severely lacking, thus leading to frustration, abandonment of the new skill, and a return to the instructional practices used prior to the PD session (Dudek et al., 2019). Conversely, research has shown that teachers provided with such supports as observation, practice, and performance feedback during the initial implementation stages of the new learning have a 95% chance of skills transfer to the classroom (Dudek et al., 2019).

Coaching as Embedded Professional Development. Instructional coaching, provided across many educational disciplines such as math, science, and literacy, is a strategy that has taken hold in many schools across the country as a means to provide ongoing teacher learning, assistance in the implementation of new initiatives, new teacher training, and in helping teachers understand and adapt their instruction to new state content standards (Desimone & Pak, 2017; Kraft & Blazar, 2017; Matsumura, 2010). This embedded professional development often takes the form of such strategies as co-teaching, mentoring, group discussions of student work and data, and observations with feedback (Desimone, 2011; Dudek, 2019; Gore & Rosser, 2020).

Systematic reform efforts suggest instructional coaching in literacy as a strategy to increase student reading outcomes through embedded professional development with teachers

(Desimone & Pak, 2017). Coaches work closely with teachers to provide on-site support for developing, extending, and improving their use of effective evidence-based instructional skills, strategies, and practices (Hudson et al., 2021; Theodore, 2008). Literacy coaches are often able to instruct teachers on understanding the content contained within each pillar of reading instruction with evidence-based practices for classroom implementation, as teachers often struggle with how to do such things as planning and implementing small group reading opportunities and providing targeted and systematic phonics instruction (Walpole et al., 2010).

Recent studies have shown that literacy teachers benefit from sustained support from coaching mentors who provide scaffolding of a small set of ideas and behaviors in a spiraling manner over time with authentic opportunities for practice, observation, and feedback (Cohen et al., 2016; Gore et al., 2020; Hindman et al., 2020; Tortorelli et al., 2021). Hindman et al. (2020) emphasized that the value in this coaching design is the consistent reinforcement of, and support for, the learning of a new set of skills and processes through a shared understanding of the learning plan between the teacher and coach. In fact, Hudson et al. (2021) found that targeted training, coupled with practice under expert guidance, produced the largest effects on teachers' content level knowledge while encouraging teachers to transfer knowledge into authentic learning situations with students. These findings highlight the possibilities of coaching in closing the research to practice gap through the support that these expert educators can provide within the classroom context (Cohen et al., 2016; Gore et al., 2020; Hindman et al., 2020; Hudson et al., 2021; Tortorelli et al., 2021). However, specific characteristics of an effective coaching model are limited and there is little direct evidence on the extent to which the identified characteristics of effective PD, implemented through a literacy coach, are related to better teaching and increased student achievement (Desimone et al., 2002; Reddy, 2019; Shernoff, 2016). This leads

to further confusion on the most effective way for coaches to support teachers in the technical learning of new content and the implementation of that learning into the classroom to meet the needs of all students. As instructional coaching has been in the forefront of many attempts to transform the educational opportunities provided by teachers as a way to improve the achievement level of students, it is imperative that the specific ways that this can prove successful be explored and examined (Robertson et al., 2019).

Many unanswered questions still remain about the effectiveness of coaches in improving teacher practice and there is little rigorous empirical research demonstrating that coaching changes teacher practice and improves student learning (Bean et al., 2010; Deussen et al., 2007; Reddy et al., 2019). Few coaching models have been employed that offer a direct assessment of teacher practices to measure teacher implementation of evidence-based strategies or impacts on student achievement (Reddy et al., 2019). Coaching at one school may look very different than it does at another due to such factors as principal perspectives on the role, variations in coach training, and differences in job duty expectations over multiple locations (Dudek et al., 2019; Matsumura et al., 2010). Moreover, little is known about teachers' experiences with coach-based professional development, including the feasibility and acceptability of this widely used practice (Kraft & Blazar, 2017; Shernoff et al., 2017). It is essential for us to investigate the variables of the coach's role that affect improved teacher instruction with the end goal of increasing student reading achievement. This knowledge is vital to ensuring that we are utilizing literacy coaches in a capacity that will have the biggest impact on teacher instruction and student reading levels.

Statement of the Problem

Professional development for teachers in the area of literacy must include follow-up support in order to provide teachers with the guidance needed to transfer the new learning into

practice within diverse classroom contexts. While literacy coaches have been tasked with this enormous undertaking, little is known about the most effective ways to change teacher practice through interactions with a coach. While positive outcomes related to broad patterns of coaching actions such as duration, frequency, professional development groupings, and types of coaching activities have been identified in previous studies, researchers contend that simply working with a coach does not guarantee a change in teachers' philosophical beliefs and classroom practices. Many questions remain about the nuances of interactions between coaches and teachers and the specific behaviors and actions employed by effective coaches (Robertson et al., 2020; Shernoff et al., 2017). Beyond broad descriptions of coaching practices (i.e., modeling, observing, co-planning, and debriefing), more specific information is needed about how competent coaches engage teachers in meaningful learning periods that bring about a change in teacher beliefs and instructional practices (Robertson et al., 2019).

Purpose of the Study

Literacy coaching is widely implemented in schools across the country to improve the instructional literacy practices of teachers with the end goal of improving student reading achievement. While we have some understanding of what effective literacy coaching can look like, the highly contextualized nature of job-embedded coaching leaves many questions unanswered about how coaches can influence the beliefs and practices of teachers. It is imperative that practices informed by research are available to guide schools and districts in implementing this embedded professional development model. By coordinating the efforts of coaching with the use of evidence-based practices that have the proven record to influence teacher literacy instructional practices, teachers will grow in their classroom instruction, thus improving the reading achievement of students to levels that finally reach and surpass the goals

set by the federal, state, and local governments. This study aimed to explore ways in which job-embedded coaching influenced teacher beliefs and practices as perceived by the teacher and corroborated by the coach.

Research Question

The employment of literacy coaches to guide teachers in improving literacy instruction offered to students, with the goal of increasing student reading levels, was a phenomenon in need of investigation. Therefore, this research study sought to answer the following research question:

How do the beliefs and practices of teachers change during the context of embedded professional development with a coach focused on literacy in a K-5 setting?

Significance of the Study

Walpole et al. (2010) found that through an investigation of Reading First coaches in five states that coaches did not work under a specific coaching model for implementation. Moreover, according to Bean et al. (2010), we know very little about the "content, purpose, or focus of the coach" (p. 90) and that large-scale studies provide little explanation of the focus of literacy coaches in school practices. While many sources have suggested that the main role of the coach is to provide embedded professional development for teachers (Bean et al., 2010; International Reading Association, 2004; Walpole & McKenna, 2004), many have documented that coaching responsibilities and tasks often seem fragmented and disconnected from literacy advocacy and teacher mentoring (Smith, 2007).

The identification of specific research-based coaching components that have a positive and direct impact on teacher practices and student achievement is necessary and has been limited since the employment of literacy coaches to improve classroom reading instruction (Bean et al., 2010; Reddy et al., 2019). This knowledge is fundamental for the development of a model of

effective coaching strategies that can be implemented to improve teacher practice and reading achievement. Walpole et al. (2010) stated that since literacy coaches do different things and "coaching influences individual teachers in different ways, this makes investigation of the relationships between specific types and aspects of coaching and specific types and aspects of teaching especially salient" (p. 119). Therefore, this research contributes to the knowledge base about literacy coaching and identifies specific coaching interventions that change teacher practices with the goal of raising student reading achievement.

Subjectivity Statement

As a former kindergarten and first grade classroom teacher for over 20 years, I can relate to the challenges of elementary teachers and the pressure that they feel to provide for all of the needs of their students. Classroom teachers are faced with the monumental task of instructing students of various levels to demonstrate growth and proficiency in all academic areas while also attending to their social, emotional, and physical needs. As classroom teachers, my colleagues and I were on the receiving end of weekly data meetings, professional development, and administrative data talks that were often tension filled, as district leaders, principals, and literacy coaches demanded to know why the proficiency levels of our students were not as high as they wanted them to be. Teachers were, and continue to be, chastised for student performance that did not meet the high standards that have been set for them and any opportunity that teachers had to give a voice to the struggles some of these students faced before coming to school was dismissed as an excuse. As teachers, we were often frustrated by leaders who were unaware of child development and expected us to engage the children in developmentally inappropriate activities with the goal of pushing the students to a higher level. I understand being on the receiving end of feedback given by coaches, administrators, and district leaders with differing levels of expertise

that were mixed in ability to help us increase student achievement. While I have always viewed this experience as a strength, I understand that it could also pose some limitations to my research if it prevents me from forming a clear vision of teacher actions in favor of viewing all teachers as victims of unfair expectations. In this study, it was important to see the beliefs and practices of the coaches and teachers from the perspective of an analysis of evidence-based practices without letting feelings from past experiences override the observations I made about actual teaching practices.

For the past eight years I have worked with K-5 struggling readers as a Reading Specialist and MTSS Interventionist/Coach through small group pull-out and inclusion reading groups. This new position has granted me access to observe the reading instruction that occurs in diverse classrooms and has allowed me to informally advise teachers in strategies appropriate for quality reading instruction. This role has given me a new perspective of the teaching that is occurring outside of my own classroom and has allowed me to have a better understanding of the differences that exist in teacher knowledge, ability, and motivation. I have been able to experience the challenges of trying to work with teachers to improve the literacy instruction they provide for their students with mixed results.

Many teachers have been open to change and have had favorable outcomes in implementing successful strategies to make significant gains in reading while others have continued to provide the same instruction for all learners or fail to furnish lessons with a focus on integrated literacy. This role helped me acknowledge that there are many teachers who do need guidance in improving classroom instruction in all areas, including explicit literacy opportunities, and that coaches and administrators do have a role in pushing them to improve their practices. For my research, I needed to position myself in a third space in order to interpret

the data that was extracted from the interactions through the lens of evidence-based practices in education in order to add to the field of improving student achievement through coaching opportunities. I understand the challenges on the classroom level and on leaders who are charged with improving student performance by working through the teachers who provide the direct instruction but I had to be open to new discoveries on both sides that I may not have considered. As a researcher, I am able to use this experience to provide recommendations for enhancing the quality of instruction provided by teachers and the strategies that are used to get them there.

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Definition of Terms

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Professional Development: continuing education and career training after a person has entered the workforce with the goal of helping them develop new skills, staying up-to-date on current trends, and advancing their career (WebCE, 2021)

Active Learning: a broad range of teaching strategies which engage learners as active participants in their learning (Center for Educational Innovation, 2021)

Lecture Style: a one-way discussion on a pre-assigned topic by a presenter with participants taking notes and working to memorize the information being given (Innova, 2015)

Literacy or Reading Coach: A person who works with teachers to enhance classroom learning by providing professional development, helping to develop curriculum-based lesson plans, conducting lesson demonstrations and evaluations, and analyzing student literacy and achievement data (Resilient Educator, 2021)

LETRS: Language Essentials for Teachers of Reading and Spelling, professional development that provides educators with a deep understanding of the skills needed to master the fundamentals of reading instruction (Lexia Learning, 2022)

Heggerty: a curriculum designed to provide systematic and engaging lessons for phonemic awareness instruction (Literacy Resources, 2020)

DIBELS: Dynamic Indicators of Basic Early Literacy Skills, a set of measures designed to assess acquisition of literacy skills (University of Oregon, 2022)

Summary

This study examined how the philosophical educational beliefs and instructional practices of a teacher were possibly influenced through professional development engagement with a literacy coach on the elementary level. In Chapter 1, the background of the topic was discussed, the problem was determined, and the significance of the study was established. The research question was clearly specified and important terms relevant to the study were defined. Chapter 2 explores the research focused on general professional development, high-quality literacy professional development, and specifics of literacy coaching for elementary teachers. Specific theories of adult learning will also be discussed. The methodology and research design, as well as data analysis procedures, will be discussed in Chapter 3. The findings of the study will be outlined in Chapter 4 and a deep discussion of the topic will be presented in Chapter 5.

CHAPTER 2: LITERATURE REVIEW

For the past several decades, federal, state, and local initiatives have attempted to improve the reading achievement of elementary students (Borko, 2004; Garet et al., 2001; Penuel et al., 2007) including a focus on evidence-based reading instruction and teacher professional development in said approaches. Despite these widespread attempts, many K-5 students have yet to demonstrate proficiency on standardized assessments of reading at both state and national levels (Cohen et al., 2017).

Although literacy teacher professional development has not always brought about the widespread systematic improvements in teacher practice viewed as essential to consistently providing students with quality reading instruction, there are still promising practices (Desimone, 2009; Garet et al., 2008; Kraft et al., 2018). Specifically, the use of literacy coaches to provide embedded school based PD continues to be popular (Matsumura et al., 2010; Robertson et al., 2020). The role of literacy coach holds significant promise when considered with the degree of support that is needed for teachers to implement new strategies and instructional practices and the considerable adaptations and additional learning that is necessary during the implementation phase (Carlisle et al., 2011; Elish-Piper et al., 2011). However, to better understand the potential benefits of literacy coaches, targeted research is still needed to explore the interactions between coaches and teachers to better understand what this working relationship might entail to produce the changes in teacher practices that are desired (Robertson et al., 2019).

The purpose of this literature review is to provide context for the exploration of using job-embedded literacy coaching as professional development. To do so, the ensuing literature review does the following: (a) begins with a review of literature highlighting the features of effective professional development for teachers, in general (b) reviews research focused on

effective professional development for literacy teachers, and (c) concludes with a review of literature focused on job-embedded PD through literacy coaching. Lastly, the theories of andragogical practice are explored including a description of Transformational Learning Theory and Knowles's Adult Learning Theory as a basis for analyzing the experiences of teacher participants in professional development activities.

Literature Review Search Procedures

Several research strategies were employed to locate references for this review. I began by reading widely in the field of literacy instruction, professional development, and literacy coaching as embedded PD to help refine my topic. Specifically, I explored the work of Hindman et al. (2020), Hudson et al. (2021), and Tortorelli et al. (2021) that examined elementary teachers' knowledge of foundational reading skills and the implementation of those concepts into the classroom. The professional development research of Desimone et al. (2002, 2003), Garet et al. (2001), and Gore and Rosser et al. (2020) was explored, as was the work of Desimone and Pak (2017), Elish-Piper and L'Allier (2011), Kraft et al. (2018), and Tadpole et al. (2010) which focused on literacy coaching in elementary classrooms.

Following refinement of my topic, I engaged in a comprehensive search of University of North Carolina at Charlotte's library using the following databases: Education Research Complete, ERIC, Google Scholar, JSTOR, Routledge, and SAGE. Keywords used for the searches included: *literacy coaching, literacy instruction, professional development,* and *reading coaches*. Studies were considered for inclusion in this review if they were: (a) published in a scholarly journal, (b) peer reviewed, and (c) based on research completed in the United States.

Features of Effective Teacher Professional Development

Professional development has long been used across many different occupations, including teaching, as a way to develop and maintain knowledge and skills in a specific area (Garet et al., 2001). These activities take many forms with extensive resources being funneled into professional development of all varieties (Desimone et al., 2011). The perceived success of these programs is often varied and difficult to measure. However, recent studies in the field have shown that effective professional development opportunities share a core set of features. Researchers have identified reform type, content focus, active learning, coherence, duration, and collective participation as six features commonly evident in effective professional development activities (Carlisle & Berebitsky, 2010; Desimone et al., 2002; Desimone, 2009; Desimone & Pak, 2017; Gore et al., 2021).

Moreover, these six features have been grouped and categorized as either structural features or features related to the activities within professional development. Specifically, Desimone et al. (2002) categorized reform type, duration, and collective participation as "structural features" dealing with the form and organization of the activity hypothesized as components effective in improving practices. In addition, active learning, coherence, and content focus are defined as related to the substance of the activity and are measured in the extent to which the activity offers those opportunities. In the following sections I define as well as summarize and synthesize research relevant to each of the six features.

Reform Type

Researchers agree that active learning in PD is more effective than traditional PD where teachers are passive learners (Garet et al., 2001; Penuel, 2007). As such, traditional PD has been widely criticized in the literature as being ineffective in providing teachers with sufficient time,

content, and activities necessary for increasing the knowledge of the teacher and fostering meaningful changes in teaching practices (Garet et al., 2001). Reform-oriented professional development, designed to significantly improve teaching practice, provides more active, in-depth engagement than traditional workshop PD sessions and demands more involved exploration of concepts and a deeper interaction with the information by participants (Desimone, 2009; Penuel, 2007). Colucci (2016) suggested that reform style PD include activities that are ongoing and connected to practice, focused on student learning and the teaching of specific curriculum content, aligned with school improvement priorities and goals, and build strong working relationships among teachers through generous amounts of collaborative time. For example, reform-oriented PD for educators takes on many forms including being mentored or coached, which usually takes place within the school day during the process of classroom instruction or throughout collaborative planning time (Garet et al., 2001). These PD activities have been found to be effective due to their proximity to practice and allow participants to make connections between the professional development and the implementation of the ideas into practice (Garet et al., 2001; Penuel, 2007). Additionally, researchers have suggested that reform types of activities may be more responsive to how teachers learn and show sensitivity to teachers' needs and goals, thus having more influence on changing teacher practice (Darling-Hammond, 1995; Garet et al., 2001). Moreover, reform type PD activities tied directly to practice such as peer observations, study groups, and coaching can be designed directly in response to teacher needs and learning preferences, thus increasing the likelihood of the transfer of learning to practice (Desimone et al., 2009; Garet et al., 2001).

Duration

Duration includes the number of contact hours spent in the activity as well as the length of time over which the PD activities occur (time span). Boyle et al. (2007) found that while short workshops or conferences can foster teachers' interest in deepening their knowledge and teaching skills, they appear insufficient in fostering the learning necessary to fundamentally alter how and what teachers teach in the classroom. Researchers have also found that PD of longer duration and time span are more likely to offer learning opportunities capable of producing integration of new knowledge into practice by participants (Garet et al., 2001; Penuel et al., 2007). However, simply holding longer PD sessions does not guarantee better results (Boyle et al., 2005).

While research has not yet indicated an exact optimal zone for duration of PD, many studies have shown support for activities spread over several months and including 20 or more hours of contact time as effective in encouraging meaningful changes in work practices (Desimone et al., 2002; Desimone, 2009; Desimone & Pak, 2017). In addition, activities of longer duration provide more opportunity for in-depth discussion of content, student conceptions and misconceptions, and pedagogical strategies (Garet et al., 2001). Garet et al. (2001) also found that activities that extend over time provide more opportunities for teachers to try out new practices and obtain feedback on their implementation. Additionally, Penuel et al. (2007) concurred that PD of longer duration and time span are more likely to contain the kinds of learning opportunities necessary for teachers to integrate new knowledge into their teaching practices.

Collective Participation

Collective participation measures the degree to which the activity emphasizes groups of professionals from the same department rather than individuals from multiple locations. There is

growing consensus that participants benefit from developing competency skills when engaged in PD with peers from the same department as such arrangements help establish learning environments with shared vision, expectations, professional commitment, and trust (Desimone & Pak, 2017; Garet et al., 2002; Penuel et al., 2007). This interactive learning community approach nurtures a mutual learning goal and allows members to support one another during application of new knowledge and skills in the workplace. Such environments provide potential for highly effective interaction and discourse as participants can actively apply the learning directly to their experiences on the job with others who may be having the same experiences (Desimone & Pak, 2017). Specifically, Penuel et al. (2006) found that teachers who engaged in PD together constituted a form of social capital for one another with teachers gaining important new information from expert teachers, thus extending the knowledge gained from the formal professional development experience and motivating the group to work through problems of practice together. Furthermore, collective participation establishes a culture supportive of reform instruction that can facilitate individual change efforts in support of the improvement of the learning of the organization as a whole (Garet et al., 2001).

Active Learning

Active learning approaches in PD opportunities, such as observations followed by interactive feedback and discussion, reviewing student work, and leading group discussions on classroom content and strategies allow for meaningful PD experiences for teachers (Desimone & Pak, 2017). This type of learning provides opportunities for participants to become actively engaged in thoughtful discussion, planning, practice of implementation, and the meaningful analysis of information through the professional development opportunity (Darling-Hammond, 1997; Desimone et al., 2002; Desimone & Pak, 2017; Garet et al., 2001; Penuel et al., 2007).

Actively reviewing student work has been found to help teachers develop skills in diagnosing student problems and designing classroom lessons at an appropriate level of difficulty based on the needs of each student and is an important component of active learning (Garet et al., 2001). Providing teachers with the opportunity to link the ideas introduced during PD directly to the teaching context through thoughtful planning of implementation is an integral part of active learning, as are activities that allow teachers to give presentations, lead discussions, and produce written work, thus encouraging teachers to delve more deeply into the information being introduced (Garet et al., 2001). Moreover, research has found that active learning increases the effectiveness of professional development as it provides participants with more frequent opportunities to practice what they have learned and receive feedback on it (Darling-Hammond, 1997; Desimone, 2009; Desimone & Pak, 2017; Garet et al., 2001). Additionally, Boyle et al. (2007) found that teachers involved in this type of PD can become more reflective, critical, and analytical when they actively think about their teaching style in the classroom.

Coherence

Coherence refers to incorporating experiences that are consistent with participant goals, standards, and employment expectations. As such, coherent PD experiences have been found to increase the effectiveness of PD activities (Desimone et al., 2009; Desimone & Pak, 2017). Garet et al. (2001) suggested assessing the cohesiveness of a PD activity by analyzing whether it builds on earlier work and is followed up later by more advanced work. Teachers obtain direction on how and what to teach from multiple sources including national, state, and local policies, textbooks, and professional literature. PD activities that align with these sources facilitate teachers' efforts to improve teaching practice while PD that conflicts with these initiatives can impede teacher growth (Desimone & Pak, 2017; Garet et al., 2001). Furthermore, PD

opportunities well aligned with a participant's professional role encourage buy-in for the new ideas as they are often more congruent with individual belief systems and allow for more focus on personalized goals for the workplace (Desimone & Pak, 2017). Coherent PD experiences provide participants opportunities to: (a) see how the elements are connected to one another, and to their real work experiences, (b) build on what they have already learned, (c) emphasize content and pedagogy directly aligned to work expectations, and (d) support teachers in developing sustained, ongoing professional communication (Garet et al., 2001).

Content Focus

Content focus refers to PD that is focused on teachers' knowledge of discipline-specific curricula (Darling-Hammond, et al., 2017). While much research points to content focus as highly influential in building effective professional development, the specific components of content focused PD continue to be debated (Desimone, 2009; Garet et al., 2001). Many argue that PD requiring a dual focus on subject matter content and how children learn it is especially important in changing teacher practice with studies in this area having shown large effects on student achievement outcomes (Corcoran, 1995; Garet et al., 2001; Kennedy, 1998). This is in contrast to the work of Gore and Rosser (2020) who studied PD with a focus on pedagogy rather than content and noted that recent studies have called the value of content-focused PD into question and suggested that further research should focus on "crystallising the types of teacher knowledge and practice that are best related to student achievement in order to improve the impact of PD" (p. 2). Arguably, much less is known about PD focused on pedagogy due to the overwhelming focus on content in PD research by scholars over the past several decades (Gore & Rosser, 2020; Kennedy, 2019). More research is needed on the focus of PD in order to ensure that the offerings are most effective for participants. Specifically, targeted research on the

professional development activities needed to encourage effective transmission of technical learning into classroom practice is needed to ensure that students receive explicit, high quality reading instruction in elementary classrooms.

Job-Embedded Learning

Another key feature of effective professional development has to do with the extent to which PD is embedded within the workplace. The seminal work of Joyce and Showers (1983) explored the process by which PD participants transfer the learning of the new skill to the context of their employment and the contrasting actions required based on the alignment between the characteristics of the PD and the workplace setting. Horizontal transfer can occur when the skill can be implemented directly from the training program "as is" with little additional required learning on the job. In vertical transfer, the new skill cannot be used unless it is adapted to the conditions of the workplace, thus requiring an extension of the learning before it can be implemented effectively. According to Joyce and Showers (1983), vertical transfer is more likely to occur when the contexts of the training and the workplace are different, the new skill is markedly different from those currently in the participants' existing repertoire, or additional understanding is required for a participant to achieve full control over the implementation of the skill. Due to the fluidity of the teaching context, teacher PD participants are likely to engage in vertical transfer of learning to classroom practice with additional practice with the skill needed before effective use of the knowledge can be attained (Shernoff, 2016). Moreover, researchers have noted that teachers need a strong command of the subject matter, the objectives, and the scope of classroom management in order to use the new skill appropriately and emphatically (Kraft et al., 2018). This often involves a period of laborious discomfort while the new skill is practiced within the context of the classroom until it can be used with the same level of fluidity

as the established repertoire of the teacher (Dudek et al., 2019; Joyce & Showers, 1983). This period is especially time consuming and arduous when the new skills are in direct contrast to the entrenched skill set that the teacher participant has relied on up until that point.

Effective Literacy Teacher Professional Development

There is widespread agreement in the reading instruction literature that a quality, well prepared reading teacher is critical to meeting the literacy needs of elementary students (International Reading Association, 2010; Kent et al., 2013; Makopoulou et al., 2019; U.S. Department of Education, 2002). However, as many as 62% of new teachers feel unprepared for the realities that they will face in the classroom despite an increased emphasis on the teaching of reading (Kent et al., 2013). This sentiment is echoed by science of reading advocates who maintain that there is an absence of instruction focused on code-related literacy skills in elementary classrooms due to a lack of preparation of teachers for the important task (Tortorelli et al., 2021). Additionally, there continues to be debate over what knowledge counts when it comes to training teachers to provide literacy instruction and what it actually means to be "well prepared" to teach reading (Borko, 2004).

Literacy teacher professional development has been viewed as one of the keys to improving the quality of U.S. schools by focusing on teacher literacy learning, and the perceived improvement in instruction that follows, as a means to increase student reading achievement (Borko, 2004; Desimone, 2011; Makopoulou et al., 2019). While this professional development is considered an "essential mechanism for deepening teachers' content knowledge and developing their teaching practices" (Desimone et al., 2002, p. 81), much of the research on literacy teacher professional development has offered discouraging results with teacher professional learning activities often being characterized as ineffective in actually changing

teacher practices (Borko, 2004; Gore et al., 2021; Kraft et al., 2018; Opfer & Pedder, 2011).

Professional development for literacy teachers continues to highlight technical knowledge despite the intricacies involved in implementing this learning in classroom settings (Tortorelli et al., 2021). Piasta et al. (2009) outlined the specialized body of knowledge needed for effective reading teaching including knowledge of the general developmental progression of literacy acquisition, knowledge of the alphabetic principle, specific reading comprehension strategies and how to teach them, and fluency and vocabulary applications. This points to the need to develop strong technical knowledge in teachers of reading. However, Piasta et al. (2009) went on to describe how this specialized knowledge influences the pedagogical and situational skills of the teacher by impacting such things as teachers' ability to correctly interpret and respond to student questions and reading errors, choose appropriate materials for decoding and spelling instruction, and support flexibility in teacher instruction with the ability to change intensity, scope, and/or sequence to meet the needs of the unique learner (Moats, 1999; Piasta et al., 2009). However, this process often requires support with research identifying a need to go beyond simply improving the technical knowledge of literacy teachers to building the teaching repertoire of reading teachers to include pedagogical and situational skills through a mix of PD that builds both theory and practice (Piasta et al., 2009; Tortorelli et al., 2021).

Tortorelli et al. (2021) sought to closely examine how preservice knowledge of code-related instruction has been studied with implications for teacher preparation for reading instruction through a review of research completed from 2001-2020. Out of the 27 studies, 21 used quantitative methods with participants while three were qualitative and three used mixed methods. Tortorelli et al. (2021) found that this emphasis on a quantitative design led the research base to rely heavily on multiple-choice assessments for PD participants that privileged

linguistic content knowledge (technical content) over pedagogical (how to teach) and situational knowledge (gained from experience). However, research into teacher preparation for reading instruction has shown that teachers need development in both the knowledge of the applicable code-related content and how to teach it to a diverse set of students in a meaningful way (Cohen et al., 2016; Moats, 2009; Tortorelli et al., 2021).

Despite pedagogical knowledge's lack of prominence in the literature as compared to technical knowledge, Moats (1994) articulated that teachers must be able to "illustrate and interpret" the knowledge for students with the ability to apply that knowledge in practice in order to successfully develop the reading skills of their students. This supports the findings of Cohen et al. (2016), who found that students are less likely to develop critical reading skills if their teachers do not possess both extensive knowledge of language structure and code-based concepts as well as the ability to apply that knowledge in practice. The implementation point requires teachers to have the understanding of how different students respond to various instructional techniques and strategies and how to change instruction if a student does not respond to a certain approach (Hindman et al., 2020; Tortorelli et al., 2021). Unfortunately, while substantial research has described how the code-related technical skills support students in proficient word reading, there has been much less discussion, agreement, and training on the most effective ways to teach these skills to students and a severe lack of empirical connections to better student outcomes (Cohen et al., 2016; Hindman et al., 2020; Tortorelli et al., 2021). The support that teachers need when implementing technical knowledge such as observations with feedback, time with a high-quality mentor, and opportunities for co-teaching experiences is crucial but much less described in the literature on code-related instruction and is often missing from literacy teacher PD activities. In fact, the qualitative studies included in the review by Tortorelli et al. (2021) and

Dudek et al. (2019) showed that teachers struggled to apply what they learned in PD sessions with real students in the classroom, thus providing a strong argument for more opportunities for literacy teachers to practice the knowledge learned during professional development.

Researchers suggest that code-related teacher preparation and professional development be reevaluated to more accurately represent the cyclical nature of developing knowledge through both explicit instruction and meaningful opportunities to practice teaching actual students (Cohen et al., 2016; Moats, 2009, 2014; Tortorelli et al., 2021). Historically, teacher professional development has focused heavily on technical content with participants released back to the classroom to implement the newly learned information and skills independently with students. This common model often lacks the follow-up and support needed as teachers attempt to navigate the challenges that arise from implementation of comprehensive literacy content and procedures required in reading instruction with actual students (Cohen et al., 2016; Hudson et al., 2021; Joyce & Showers, 1981; Tortorelli et al., 2021). This design discounts the cyclical nature of learning where participants benefit from gaining small amounts of information with time and expert support to apply the learning before additional learning input occurs.

In sum, effective literacy learning experiences that hold exceptional promise in helping teachers make improvements in classroom literacy instructional practices have been built on the characteristics of general teacher professional development. This includes teacher assessments that measure literacy knowledge more broadly to include all types of knowledge necessary for effective implementation and provide a support structure that enables effective classroom implementation based on individual teacher needs (Cohen et al., 2016; Darling-Hammond et al., 2011; Desimone et al., 2009; Hudson et al., 2021; Tortorelli et al., 2021). However, the literature is clear that professional development researchers and designers continue to debate over an

emphasis on theory and practice with teacher participants, target technical knowledge PD literacy learning, and persist in deliberation about how to use embedded literacy PD to bring about teacher change (Cohen et al., 2016; Tortorelli et al., 2021). As substantial resources have been spent on teacher professional development as a form of school reform at the local, state, and federal levels, it is imperative that we gain an understanding of what makes literacy PD effective as a means to understanding the success or failure of many educational reforms (Desimone, 2009).

Literacy Coaching as Professional Development

The International Reading Association defines a literacy coach as a reading specialist who focuses on providing professional development for teachers by giving them additional support needed to implement various instructional programs and practices (Carlisle et al., 2011; IRA, 2004). The concept of literacy coaching as embedded PD is based on the belief that traditional forms of PD offered to teachers are often inadequate for guiding teachers through the implementation of new and challenging forms of classroom instruction (Dudek et al., 2019; Matsumura et al, 2013). PD in reading, in which a school-based literacy coach provides support for teachers' learning, is viewed as a promising means of developing the quality of classroom reading instruction and in turn students' acquisition of reading skill (Carlisle & Berebitsky, 2010).

Over the past decade, literacy coaches have been tasked with providing professional development for teachers in many schools by providing embedded support in making instructional changes or decisions in order to improve student achievement in reading and writing (Deussen et al., 2007; Robertson et al., 2020). They accomplish this by observing teachers' classrooms, providing feedback, modeling lessons, guiding teachers through an

examination of data, and facilitating professional development sessions (Bean et al., 2010; Coburn & Woulfin, 2012; Deussen et al., 2007; Dudek et al., 2019; Neuman & Cunningham, 2009). Many scholars suggest that effective professional development is provided within the classroom context for a sustained duration through one-on-one interactions rather than "drive-by coaching" in which coaches briefly talk with the teacher in passing or through short classroom visits (Dudak et al., 2019; Kraft & Blazar, 2017; Neuman & Cunningham, 2009; Shernoff et al., 2017). In fact, Kraft & Blazar (2017) found that teachers often need 50-80 hours to develop new skill mastery through the use of observation, practice, and performance feedback. Therefore, much of the literature includes recommendations for instructional coaching to reflect principles of active learning that are individualized, intensive, sustained, and context specific to support the new skill development of teachers (Dudek et al., 2019; Kraft & Blazar, 2017; Shernoff et al., 2017). However, guidance on how best to fulfill these strong recommendations is far from clear.

The general features considered to be common in effective professional development (content focus, active learning, coherence, duration, and collective participation) are often considered in isolation from the complex teaching and learning environments that teachers inhabit and fail to capture how the learning activity influences teacher practice despite teachers' self-reported knowledge of skills and changes in teaching practices (Gore et al., 2021). However, literacy coaching shows promise in maximizing these characteristics through support of teachers to improve classroom reading instruction (Desimone et al., 2017; Garet et al., 2001). Literacy coaching is a strong example of duration in PD as it is usually ongoing during the school year and often involves continuous cycles of reflection and teacher growth which helps cultivate the sustained implementation of changes in teacher practice (Desimone et al., 2017). Collective participation is often evident within embedded literacy coach PD as teachers participate in

learning teams with peers working on the same grade level or subject area where they may discuss such things as instructional improvement strategies, student data, and curriculum modifications (Desimone et al., 2017). The support of the coach during this time allows teachers to access the expert opinion of the coaching professional when facing instructional implementation challenges or when working to gain a deeper understanding of ways to improve their classroom practices (Coburn et al., 2021; Desimone et al., 2017).

Coaching is a common form of high active learning PD that involves one-on-one, small group, and/or team interactions that allow teachers to receive real-time, ongoing feedback of their newly attempted teaching practices (Desimone & Pak, 2017). This often takes the form of observation of a lesson by a coach, in person or virtually, followed by a debriefing, thus allowing for a dynamic give and take with mentor and mentee and trial and error in the teaching experiences (Desimone & Pak, 2017). However, the literature is clear in the distinction between these PD experiences and other interactions with the coach that involve the more directive, explicit stance taken by the coach when ensuring the fidelity of use of a newly mandated teaching model or modeling the implementation of a certain strategy (Desimone, 2009; Desimone & Pak, 2017; Garet et al., 2001). Desimone and Pak (2017) pointed out that while there are certainly times when mandates, encouragement, and explicit direction are required practices, coaches should focus on active engagement and opportunities for teacher leadership in their own PD. Garet et al. (2017) concurred and stated the importance of observing and being observed as opportunities for teachers and coaches to engage in reflective discussions about the goals of the lesson, the tasks employed, teaching strategies, and student learning.

Instructional coaching has been found to provide coherence as the coach supports teachers in the navigation of new instructional practices, based on their knowledge and beliefs,

through focus on personalized goals generated from the needs of the students and teachers as opposed to traditional PD which was based on a top-down mandate of teacher change (Desimone & Pak, 2017). Due to the embedded nature of coaching into the daily practices of teachers, coaches support teachers in applying PD directly into their classrooms and provide guidance on how to balance the competing focus of multiple initiatives and reforms (Coburn & Woulfin, 2012; Desimone & Pak, 2017).

Professional Development Delivery

While professional development opportunities have been shown to help teachers improve their effectiveness, research has found that a single workshop or event is not sufficient; professional development must be intentional, ongoing, and systematic (Kraft et al., 2018; Matsumura et al., 2010; Stephens et al., 2011). However, lecture-style workshops utilizing the literacy coach continue to be prevalent in schools, as they are more cost and time efficient, despite their inability to differentiate instruction for teachers while also undermining the capabilities of coaches to provide embedded PD more directly related to individual teachers and classrooms (Dudek et al., 2019; Shernoff et al., 2017). According to Dudek et al. (2019), the failure of traditional professional development stems from its inability to fully engage teachers in the implementation of the new skills taught and does not provide opportunities for teachers to receive support during the implementation process. Teachers reported to Shernoff et al. (2017) that traditional workshop-based professional development was simply an opportunity to "get information" to take back to try out in the classroom, whereas coach-based interactional opportunities helped teachers expand and implement new instructional strategies which are tailored directly to the needs of the particular classroom and teachers. Recent studies have also identified the need for teacher learning to be a dynamic, active process providing a combination

of theory and hands-on practice within a framework of support (Kraft & Blazar, 2017; Shernoff et al., 2017), with Hudson et al. (2021) reporting that literacy teachers benefit from targeted, sustained training that provides teachers with the opportunity to apply the new knowledge, ideas, and pedagogical strategies under expert guidance. The seminal work of Joyce and Showers (1983) advocated for a combination of theory, the observation of demonstrations, and practice with feedback as effective in enabling a teacher to model the new skill fluidly and appropriately while effective transfer into the active teaching repertoire requires even further work. According to Joyce and Showers (1983), "continuous practice, feedback, and the companionship of coaches is essential to enable even highly motivated persons to bring additions to their repertoire under executive control" (p. 4). This early support for teacher coaching in schools outlines the importance of a strong relationship in which the teacher and coach engage in high yield interventions, such as mutual reflection and problem-solving, opportunities for technical feedback, an in-depth analysis of application, and an embedded discussion of how to adapt the learning to different types of students.

Characteristics of Effective Coaches and Coaching Models

Although the research is consistent on the intended base structure of quality coach-based professional development, the implementation of the process and specific content involved is less clear (Neuman & Cunningham, 2009; Schachter et al., 2018). Despite the relative agreement that professional development is most effective when it involves such elements as targeted observations, supportive critiques of practice, and ongoing classroom modeling, the actual implementation of coaching policies and programs varies widely between schools (Matsumura et al., 2010; Neuman & Cunningham, 2009). Many factors have been found to influence these discrepancies in coaching implementation such as differing policies on the qualifications of

coaches, variations in the definitions of the role of the coach, norms for teachers' professional communities across schools, and principal leadership (Deussen, et al., 2007; Matsumura et al., 2010; Reddy et al., 2019). Few coaching models exist to provide a framework for a coaching experience that guides changes in teacher practices, through the use of formative assessment to inform the coach about the strengths and needs of the teachers, in an attempt to build on the instructors teaching skills. Many coaching models vary in foci and efficacy and often focus on single targets for change and neglect to address classroom-level system changes (Dudek et al., 2019; Matsumura et al., 2010).

However, one promising framework, the Classroom Strategies Coaching (CSC) model, incorporates active learning techniques to help teachers develop evidence-based instructional techniques and behavioral management strategies. The CSC model views teachers as active collaborators and decision makers throughout the coaching process and provides extensive opportunities for coaches to conduct classroom observations, model specific strategies, and provide specific feedback (Dudek et al., 2019; Reddy et al., 2019). The process is implemented through the identification of instructional needs and goals, the development of plans to match, specific steps to monitor plan implementation, and evaluation of the progress towards the goals. While more research needs to be conducted to determine the degree to which the CSC model can influence teacher literacy instruction and the effect that it has on student achievement, it provides a framework that uses adult learning theory to grow teachers in their practice in a coordinated effort. Unfortunately, the use of specific coaching models such as CSC is varied with high-quality programs being proven difficult to develop, scale, and sustain (Dudek et al., 2019; Kraft et al., 2018; Shernoff et al., 2017).

Much of the research regarding literacy coaching has been about documenting the various roles that coaches engage in, not the relationship between these activities and a change in teachers' reading instruction (Schachter, 2015). Therefore, it is difficult to determine which specific interactions with teachers will have the effects on teacher beliefs and practice that bring about improved student achievement. Some researchers have critically examined issues of coaching intensity and application and question what it is specifically about coaching that leads to changes in practice student achievement (Diamond & Powell, 2011; Wasik & Hindman, 2011). However, the focus was particularly on the relationships between coaches and teachers without providing rigorous evidence on what changes in the teachers' practice and how students benefit from this change (Schachter, 2015).

In a rare move, Elish-Piper and L'Allier (2011) investigated the relationship between the various aspects of literacy coaching and student reading gains in grades K-3 in a school district that received a Reading First grant. Findings suggested that the amount of time spent with teachers and five specific aspects of literacy coaching (conferencing, administering assessments, modeling, observing, and providing specific professional development on reading comprehension) predicted student reading gains at one or more grade levels (Elish-Piper & L'allier, 2011). Their research represents the type of structured studies that must be completed in order to determine the relationship between specific literacy coach activities and the way that they impact teacher beliefs and practices and ultimately student reading gains. Unfortunately, the research in this area is limited and somewhat dated with a lack of recent data to add to the field of literacy coaching as a way of improving the reading achievement of students. With vast amounts of resources being pumped into providing professional development in this manner, research must be completed and updated to ensure that the desired gains are being shown in

teacher practice and student reading and that literacy coaches are being utilized in the most effective ways.

Theory to Practice

Given the lasting impact that teachers have on the long-term outcomes of students, it is troubling that much of the research finds that many of the professional development programs implemented in schools often fail to produce the widespread systematic improvements in instructional practices or student achievement that such interventions were developed to accomplish (Garet et al., 2016; Kraft et al., 2018). The lack of convergent evidence on the content and methods of teacher preparation or professional development programs is evident in the wide variations of training practices offered to teachers. Much of the controversy stems from the debate over a focus on theory and/or practice and the most practical ways to guide teachers to apply the learning to classroom practices using cost and time effective methods. Research has found that teachers need a depth of knowledge that includes content and pedagogical knowledge as well as the situational knowledge of how to adapt instruction with real students (Hudson et al. 2021; Tortorelli et al., 2021). Neuman and Cunningham (2009) found a lack of change resulting from a professional development class alone with only modest growth in teacher knowledge and very limited application to language and literacy practices in the classroom following the PD, while Hudson et al. (2021) stressed that literacy teachers may have difficulty with generalizing new content knowledge into practice without support. Through increased research, several critical features of coaching programs are being established to include such things as job-embedded practice, intense and sustained durations, and a focus on specific skill sets and active learning (Kraft et al., 2018). This supports early work by Joyce and Showers (2002) who found that professional development which combined theory-based professional instruction, often in

the form of traditional lecture with hands-on practice and feedback, led to improved instruction.

More recent research is in agreement and has found professional development to be most

effective when interventions are aligned to the classroom context, when training occurs over

time, and when modeling and feedback are employed frequently (Shernoff et al., 2017).

Unfortunately, there continues to be severe inconsistencies in the implementation of professional

development coaching for teachers across states, districts, and even across local schools (Dudek

et al., 2019; Kraft & Blazer, 2017; Matsumara et al., 2010).

Teacher Buy-In

Many teachers report advantages to working with a coach, such as the ability to provide a

new perspective on classroom interactions and the enhancement of classroom practices by

providing the teacher with new tools or strategies (Shernoff et al., 2017). However, not all

teachers are as willing to accept the guidance of a coach with the culture of the school often

dictating the overall success of coaching supports. Coaching, as opposed to lecture-style

professional development, requires participants to open themselves up to critique with the

recognition of personal weaknesses. Teachers who perceive the observation and feedback cycles

as evaluative in nature, intended to document shortcomings, are often unwilling to acknowledge

a coach's critiques or take risks through experimentation with new instructional techniques

(Kraft et al., 2018). Lack of understanding of the student and school context were also identified

as reasons teachers were apprehensive of coaches as they felt that a coach who lacked familiarity

with the students and school culture may make hasty judgements and evaluations about teacher

and student skills and competencies (Shernoff et al., 2017; Stephens et al., 2011). While some

teachers viewed the coach as "another pair of eyes" who could provide the teacher with new

insight surrounding classroom practices, others felt that the coach was another administrator

coming in to keep an eye on the teacher in an evaluative way (Shernoff et al., 2017). Regardless of the focus of coaching programs, the components contained within its structure, or the expertise and enthusiasm of the coach, the research states that coaching is unlikely to impact instructional practice if the teachers themselves are not invested in the coaching process (Dudek et al., 2019; Kraft et al., 2018). Developing an awareness of the tenets of available adult learning theories is a critical component to effectively engaging teachers in PD experiences that will have the potential to make changes in classroom practices and improve student reading achievement.

Despite the documented potential of coaching as high quality, embedded PD, discrepancies in the effectiveness of literacy coaches in influencing teacher instruction continue to be widespread throughout the literature and very few studies measured the effects of coaching on teaching and learning outcomes in the same design (Kraft & Blazar, 2018; Matsumura et al., 2013; Neuman & Cunningham, 2009; Reddy et al., 2019; Shernoff et al., 2017). There is very little information about the reliability of outcome measures used to determine coaching influence including observation instruments and self-reported surveys (Kraft et al., 2018). There are notable gaps between examples of coaching practices implemented in many schools and the coaching practices validated by rigorous empirical research (Shernoff et al., 2017). Some researchers even question the reality of coaching implementation with coaches often spending very little time working with teachers and often being viewed as simply resource coordinators or consultants (Bean et al., 2010; Kraft & Blazar, 2017; Neuman & Cunningham, 2009). We still know very little about what makes for an effective literacy coach and the lack of widespread implementation of the limited coaching models available makes it exceedingly difficult to determine the length and features of such models that would bring about a change in teacher practice (Dudek et al., 2019; Kraft et al., 2017). While many studies of coaching show positive

impacts on teaching and/or learning, few studies exist that employ experimental designs meant to test the effects of school-based literacy coaching programs on teaching and learning in comparison to traditional forms of PD (Matsumura et al., 2013). Further, research is extremely limited on the effects of coaching on student achievement with very few studies conducting an analysis on the student/teacher/coach relationship to determine how coaches influence the students through work with the teacher (Elish-Piper & L'Allier, 2011; Kraft & Blazar, 2017). While there is an overwhelming belief that it is critical that literacy teachers receive support for reading instruction such as in observations with feedback and high-quality mentorship, this process is rarely fully described in the literature surrounding teacher preparation for reading instruction (Cohen et al., 2016; Tortorelli et al., 2021).

Adult Learning Theory

Adult learners, such as literacy teachers, have different requirements for their instruction than children due to the unique needs and expectations of experienced adult learners (Knowles et al., 2005; Teaching Excellence in Adult Literacy Center, 2011). Andragogy, the method and practice of teaching adult learners, first coined by Alexander Kapp in 1833, views the adult learning process through a transactional model where participants desire to know why they need to learn something, view learning as problem solving, and learn best when the topic is of immediate value (Knowles et al, 2005; Teaching Excellence in Adult Literacy Center). Early research by Lindeman (1926) identified key assumptions about adult learners which focused heavily on the experiences of these learners and is life-centered and individualized to the needs and interests the learner has developed through the cumulation of life situations. This early research is supported by the later theories of Transformational Learning Theory (1991) and Knowles's Adult Learning Theory (1980).

Transformational Learning Theory

This study was grounded in Transformational Learning Theory as a basis for examining how interactions of coaches and teachers can bring about a shift of consciousness and ultimately a change in practice. Transformational Learning Theory, originally developed by Jack Mezirow and presented in his work *Transformative Dimensions of Adult Learning* (1991), is constructivist in nature and maintains that the way adult learners interpret their experience is paramount to making meaning and eventual learning (Taylor & Cranton, 2012). Mezirow's Transformational Learning Theory considers the way that learners interpret and reinterpret their learning experiences as central to making meaning as they continuously evaluate their past ideas and understandings while receiving new information, leading to a possible fundamental change in their world view (Teaching Excellence in Adult Literacy Center, 2011). Through this theory, learners begin to question prior held thoughts and ideas and examine information from new perspectives, thus transforming prior knowledge and making way for new understandings (Mezirow, 1991; Taylor & Cranton, 2021; Teaching Excellence in Adult Literacy Center, 2011).

Central to the adult learning process is the practice of formulating dependable beliefs about our experience, assessing the context of these experiences, seeking informed agreement on their meaning and justification, and making decisions based on the resulting insights (Mezirow, 2012). Teachers who embrace changes in beliefs and practices engage in reflective discourse before, during, and after their personal learning experiences in order to challenge assumptions and consider various perspectives related to the instruction provided for their students. Transformational Learning Theory guided this research to frame how adult learners (teachers) developed dependable beliefs of their experience, considered them in the context of their lives,

and possibly changed instructional practices based on their new insight gained through the process of intervention with the literacy coach.

Knowles's Adult Learning Theory

This study was also analyzed through the lens of Knowles's Adult Learning Theory, a core set of adult learning principles that can be applied to all adult learning situations (Knowles et al., 2005). The six principles of andragogy, the method and practice of teaching adult learners, are: the learner's need to know, the self-concept of the learner, prior experience of the learner, readiness to learn, orientation to learning, and motivation to learn. This theory of adult education makes the assumption that adults need to know why they need to learn something, they need to learn experientially, adults approach learning as problem solving, and adults learn best when the topic is of immediate value. The tenets of Knowles's Adult Learning Theory focus on giving adult learners a clear understanding of why they are doing something, lots of hands-on experiences, and less direct instruction so that they can focus on problem solving independently or with other participants (Knowles, 1980).

Knowles's Adult Learning Theory makes the clear distinction between pedagogy, in which children are the submissive learners with teachers holding full responsibility, and andragogy, with the perceived need for a transactional model based on the six principles and assumptions of adult learning. It is essential that the effectiveness of professional learning experiences for adults be considered through the assumptions of theories of adult learning in an effort to understand the designs that will lead to positive improvements in participant capacity in the workplace by meeting the needs and requirements of adult learners (Knowles et al., 2005; Teaching Excellence in Adult Literacy Center, 2011). Knowles' Adult Learning Theory shares similar and complementary characteristics with Transformational Learning Theory and together

they provided a powerful lens with which to analyze how teachers and coaches negotiated the teaching and learning environment through embedded professional development and coaching cycles in an attempt to bring about a change in classroom teaching beliefs and practices.

CHAPTER 3: METHODOLOGY

Over the past two decades, national and state reform efforts have focused on instructional improvements gained through the use of learning experiences for current and prospective educators as a means of improving instruction and raising student achievement (Borko, 2004: Burke et al., 2012; Garet et al., 2001; Penuel et al., 2007). While these professional development opportunities for teachers have changed considerably over the years in an attempt to more closely resemble the challenges of the classroom, PD offerings often entail one-size-fits-all workshops in contexts far removed from school and student contexts (Dudek et al., 2019; Patten et al., 2015; Shernoff et al., 2017). While multiple large-scale studies have shown how PD can influence teachers' knowledge and practice (Garet et al., 2001; Penuel et al., 2007), impact evaluations have found that PD programs more often than not fail to produce the systematic improvements in instruction and student achievement that are rigorously sought by state and federal policy makers (Garet et al., 2008; Kraft et al., 2018). Therefore, the understanding of what makes teacher-specific PD effective is crucial in order to better understand the success or failure of educational reform efforts (Desimone, 2009).

While research on teacher professional development questions widespread effectiveness on literacy instruction, studies offer some promising directions. In addition to the six characteristics identified in effective PD (Desimone et al., 2002; Garet et al., 2001), the early work of Joyce and Showers (1983) found that learning experiences that combined traditional lecture with hands-on practice and feedback led to improved instruction. Subsequent research found PD to be most effective when supports were tailored directly to classroom contexts through learning opportunities provided over time with modeling and feedback being frequently implemented to encourage the vertical transfer of learning to occur (Joyce & Showers, 2002;

Penuel et al., 2015; Shernoff et al., 2017). This concern over the effectiveness of teacher-specific PD has led to a large-scale implementation of teacher coaching devised to provide embedded learning experiences on the school level (Matsumura et al., 2010; Walpole & McKenna, 2004). However, the implementation of coaching policies and programs varies widely between schools and has provided mixed evidence as to its effectiveness in improving instruction and learning (Duessen et al., 2007; Matsumura et al., 2010). Despite positive conclusions associated with broad characteristics of coaching actions such as duration, frequency, collective groupings, and specific coaching activities such as modeling and observation with feedback, simply working with a coach for a sustained time does not assure a change in teaching practices (Elish-Piper & L'Allier, 2011; Robertson et al., 2019; Walpole et al., 2010).

Questions still remain about the nuances of interactions between coaches and teachers with only limited evidence about the specific behaviors and actions employed by effective coaches (Kraft & Blazar, 2017; Robertson et al., 2019). This study explored coach/teacher interplay to identify specific coaching interactions tied to a perceived shift in practice in order to provide guidance in developing coach supported PD. A case study approach was utilized to answer the following research question:

How do the beliefs and practices of teachers change during the context of embedded professional development with a coach focused on literacy in a K-5 setting?

Research Design

The design of this study was a qualitative case study for the purpose of providing insight, discovery, and interpretation of the experiences of participants in their interactions with each other in professional development opportunities in the school setting. According to Yin (2014), case study research aims to answer "how" and "why" questions and seeks to investigate a

contemporary phenomenon in depth and within its real-world context. This was appropriate for an investigation into the interactions and possible evolution of teacher beliefs and practices within an elementary school setting. Moreover, the contextual conditions of the instructional environment do not often contain clearly evident boundaries from the phenomenon which made case study research applicable to this study. In addition, Merriam (1998) defined case study research as an intensive holistic description concentrated on a single phenomenon in order to uncover the interaction of significant factors with an emphasis on the end product of the case investigation. Case study research allows for a clear understanding of real-world situations and assumes that such an understanding is likely to involve important contextual conditions that are pertinent to the case (Yin & Davis, 2007). A case study design is effective in contexts which hold many variables of interest, relying on multiple sources of evidence, which ultimately converge in a triangulating fashion (Merriam, 1998; Yin, 2014). This approach was applicable to this study as there were many components to the teacher/coach relationship that needed to be examined.

Case study research allowed for the exploration of ideas of effective coaching that were developed directly from the information given from the participants and enabled the researcher to probe more deeply into the data provided. The elements identified as influential to a teacher's beliefs and classroom instruction were further analyzed to determine things such as what made that interaction so impactful and if the particular interventions could be implemented on a larger scale. In addition, the selected research design was relevant in the quest for information on how to provide guidance on the effective use of literacy coaches, who are used to improve the instruction of classroom teachers, and ensure that these resources have the ability to bring about the change that is desired.

Research Context

The purpose of this study was to examine ways in which job-embedded coaching as PD influenced teacher beliefs and practices as perceived by the teacher and corroborated by the coach.

Research Setting

The research study took place at Inglewood Elementary School within the Wildwood School district (all names are pseudonyms). The school system is located in the Southeast United States and employs approximately 7,500 employees, including more than 1,500 part-time and contract workers. The Wildwood School district educates more than 52,000 students Pre-K through Grade 12 across 44 elementary, 14 middle, 13 high, and seven specialty schools for a total of 78 schools. Districtwide, 34.5% of the students identify as White, 29.4% as African American, 28.4% as Hispanic, 4.7% as Multiracial, 2.7% as Asian, and less than 1% as American Indian or Native Hawaiian/Pacific Islander. Demographic information specifically for Inglewood Elementary is as follows: 59.4% African American, 22.1% Hispanic, 12.9% White, and 5.6% Multiracial. The percentage of students at Inglewood Elementary that qualified for free or reduced meals at the time of this study was 69.9%. All participants identified as White females. This site was selected based on convenience, as it is local to the researcher, and provided rich and credible information through deep engagement with the teachers and the full-time coach.

Inglewood Elementary is considered a low performing school, receiving an F state report card grade in 2019, and, according to the district website, receives priority for services and action oriented strategies that will lead to systemic change and improve learning outcomes for at risk students in underserved communities. This includes enhanced staff resources including three

Multi-Classroom Lead (MCL) teachers who lead a classroom while coaching grade level teammates, an Instructional Facilitator, and a K-3 Literacy Coach. District level coaches for math, science, and reading also come to the school weekly to provide support for enhancing instructional practices. Therefore, the teachers at Inglewood Elementary are exposed to many coaches on a daily/weekly basis and are generally accustomed to engaging in many PD opportunities with professional feedback from many sources.

Research Participants

This study gathered data from one elementary K-3 literacy coach and three elementary teachers in grades 1 and 2 who participated with the coach in daily/weekly professional development activities. PD activities were defined as any professional interaction with the coach from informal/formal discussions to formal PD workshops and everything in between such as analyzing student data, coach modeling, and observations with feedback. Purposeful sampling was used to identify eligible teacher participants. Purposeful sampling identifies and selects individuals who have experience with the phenomenon of interest or who are especially knowledgeable about the area of study (Patton, 2015)

All classroom teachers at Inglewood Elementary were already enrolled in PD that included weekly literacy coach support and therefore were initially eligible for study participation. Additionally, all three teachers and the coach were participating in state initiated Language Essentials for Teachers of Reading and Spelling (LETRS) professional development implemented on the district level using LETRS trainers through Lexia Academy. According to the developers of the program, LETRS is designed as the foundation for systematic literacy improvement by teaching instructors the skills needed to master the fundamentals of reading instruction (Lexia Learning, 2022). Therefore, participants engaged in asynchronous PD

organized into professional learning course modules as well as live instruction from trainers focused on evidence-based understandings and strategies focused on phonological awareness, phonics, fluency, vocabulary, comprehension, writing, and language and grounded in the science of reading. Specifically, this included instruction on units 1-4 with each unit requiring 8-10 hours of independent module work for each participant and 4 overall sessions with the live trainer in Zoom for approximately 7 hours per session. Thus, a total of 60-68 hours of professional development was spent in LETRS over the course of the 2021-2022 school year. While not the specified direct intention of the district, the placement of the literacy coach at the school level situated her to support LETRS PD and provided an essential bridge between knowledge and practice for teachers surrounding reading instruction.

Eligible teacher participants for this study were able to provide specific information on the interventions received from the literacy coach with firsthand accounts of how they implemented the information into their classroom instruction or potentially modified their philosophical beliefs and/or teaching practices based on the interactions with the coach. For inclusion in this study, the literacy coach participant was required to provide professional development to elementary classroom teachers on a daily or weekly basis and be willing to articulate the interventions used, the ways that teacher change is measured if applicable, and coach perceived changes in teacher practice.

Prior to participant recruitment, the study protocol for this research was approved by the Institutional Review Board (IRB) at the University of North Carolina at Charlotte. After IRB approval, a recruitment email eliciting participation was sent to classroom teachers and coaches who fit the aforementioned criteria, from a list provided by the principal, followed by a return phone call from the researcher to those who expressed initial interest in the study (see Appendix

A). The researcher asked initial interview questions over the telephone in an attempt to determine the participants who would be able to discuss engagement in PD and changes they may have experienced with an attempt to develop a somewhat homogenous participant group relating to years of experience and grade level taught. Participants were asked to commit to availability over a four-month period from late March-June 2022. Prior to data collection, each participant was asked to sign a letter of informed consent and the researcher gained that consent prior to the onset of data collection (see Appendix B). Any reference to participant or company names are pseudonyms.

The first participant, Mrs. Smith, works as a full time K-3 literacy coach at Inglewood Elementary. Her approximately twenty years of experience in education includes kindergarten and first grade classroom teaching and a master's degree in reading education K-12. This was her first year in a literacy coaching position. Participant two, Mrs. Morgan, has been teaching for four years, all of which have been at Inglewood in second grade. During this study, she was working on a Master of Arts in Higher Education Administration degree. Ms. Bautista, participant three, has also been teaching for four years with two years in kindergarten at another school followed by two years in first grade at Inglewood. Finally, Ms. Rosela, participant four, has been teaching for six years. She taught fourth grade for two years at another school, kindergarten for three years after coming to Inglewood, and was finishing her first year in first grade during our time together. She has a master's degree in literacy and briefly worked as a substitute reading interventionist while in graduate school.

Figure 1

Visual of Case Context
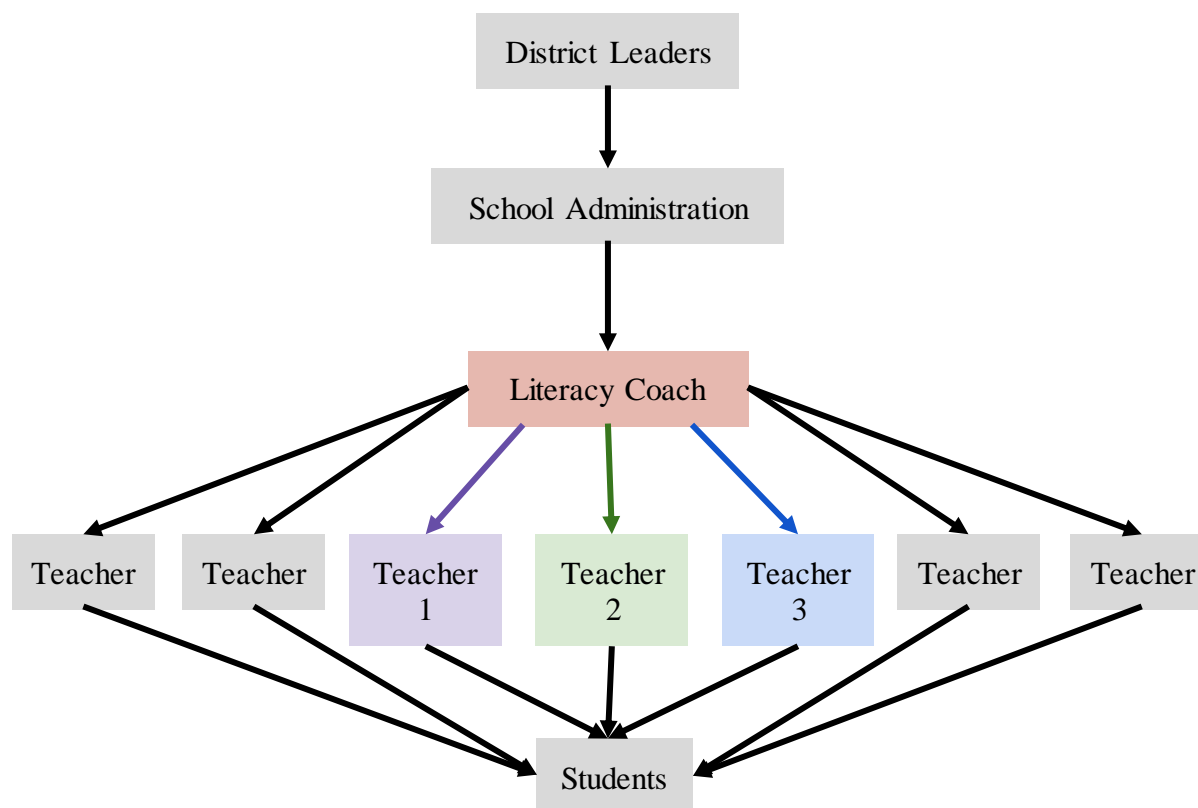
Case 1 = Literacy Coach + Teacher 1
Case 2 = Literacy Coach + Teacher 2
Case 3 = Literacy Coach + Teacher 3

Data Collection Methods and Procedures

Data collection methods for this study involved coach and teacher interviews as well as classroom and professional development session observations and brief Google surveys. In Table 1, I share the timeline followed for data collection. The interviews served to answer the research question "How do the beliefs and practices of teachers change during the context of embedded professional development with a coach focused on literacy in a K-5 setting?" through the different lenses of the teacher and the literacy coach. The observations allowed the researcher to

deepen the narrative through illustrations of the professional development activities engaged in during sessions and actual teacher practices in the classroom. Google surveys provided the opportunity for participants to supply information on their recent PD activities as well as responses to those sessions in the form of thoughts, feelings, and implementation of ideas. These surveys functioned as a type of quick journal entry and provided a snapshot of weekly activities as well as documentation of possible change over time in participant beliefs and teaching practices. Data gathered from these surveys was not only used during the data analysis process to add to the themes that emerged from the data but also to inform the interview questions for the following cycle. Detailed notes were kept during professional development and classroom observation sessions and all interviews were recorded and transcribed.

Table 1

Data Collection and Analysis Timeline

	Data Collection	**Data Analysis**
Late March	Coach Interview #1 Observation of PD Session Teacher 1 Interview #1 Teacher 2 Interview #1 Teacher 3 Interview #1 Google Survey #1 Classroom Observations*	Data transcription Member checking of transcripts
April	Coach Interview #2 Observation of PD Session Teacher 1 Interview #2 Teacher 2 Interview #2 Teacher 3 Interview #2 Google Survey #2 Classroom Observations*	Data transcription Member checking of transcripts
May	Coach Interview #3 Observation of PD Session Teacher 1 Interview #3	Data transcription Member checking of transcripts

Teacher 2 Interview #3
Teacher 3 Interview #3
Google Survey #3
Classroom Observations*

June - July	N/A	Data analysis and triangulation of all sources of data

Note. *One classroom observation per teacher occurred each month of the study (n=3 observations per participating teacher).

Interviews

Three individual semi-structured interviews with the literacy coach and three individual semi-structured interviews with each teacher were guided by a list of questions and issues explored in whatever order the conversation took naturally (see Appendix C). Initial interview questions were developed around the following areas: warm-up, general elements of teaching/coaching, specific coach/teacher interactions, reflections, and suggestions for change. Follow-up questions for the second and third rounds of interviews with the teachers and coach focused on the areas of specific coach/teacher interactions and a change in instructional beliefs and practices in order to dig deeper into the coaching interventions that influenced teacher beliefs and instructional practices. The purpose of the teacher interviews was to further draw upon the feelings and experiences of the teacher as interactions with the reading coach were recounted and how these exchanges may have impacted teaching beliefs and practices. The purpose of the coach interviews was to learn more about intervention implementations, perceptions of classroom instructional practices, and the goals and procedures of the reading coach. Each interview was conducted via Zoom for coach and teacher convenience. Audio/video recordings of the interviews were made through Zoom to the Zoom Cloud which provided an initial transcription of the interviews.

The data collection process for this study began with one individual coach interview followed by three individual teacher interviews with each session lasting approximately 30-45 minutes (March 2022). The coach interview provided information on what professional development activities were given to teachers at the school and teacher interviews served to describe the impact that these interventions had on the instruction of teachers. A follow-up interview with each teacher and coach participant was completed one month later and lasted approximately 30-45 minutes (April 2022) followed by a final interview in May 2022 of the same time length. This enabled the researcher to probe deeper into the ideas provided during the first interview while new changes in teacher instruction were noted and investigated. Each interview was audio/video recorded in Zoom, with participant consent, and was transcribed at the completion of the session. No additional interviews were needed as the researcher validated the data collection through prolonged engagement and persistent observation in the field with the initially prescribed data collection sources proving sufficient.

Observations

Classroom observations were conducted throughout the entire study to illustrate the feelings, experiences, methods, and beliefs of the teacher participants and deepen the narrative as the researcher related the story of how coaches impact the practices of teachers. The observations provided a firsthand encounter with the teacher in the classroom context as a way to triangulate the data rather than simply relying on teacher self-reporting during interviews and Google surveys. These encounters also provided a context for participant testimonials and supplied specific reference points for subsequent interviews and Google surveys. These classroom observations were completed throughout the data collection process as teachers described changes in their teaching and were willing to share the experience in the natural field setting with

the researcher. Classroom observations lasted approximately one hour and were scheduled when the teacher was implementing reading instruction with students (March-June 2022).

Required observations of PD sessions were scheduled and completed three times during the data collection period to allow the researcher to closely examine the delivery of PD, the interactions of teachers and coach, and to act as a springboard for the focus of future interview and survey questions. Professional development observation #1 lasted for 1.5 hours while the last two PD observations lasted for one hour each. Field notes were taken by the researcher during all observations to capture specific examples of implementation of instructional methods used by the teachers and the professional interactions of the coach and teachers during instruction and professional development sessions (see Appendix D).

Google Surveys

A brief Google survey was sent to participants once a month on a week when they were not engaging in an interview or a classroom or professional development observation for a total of three surveys during the data collection period. The surveys contained between three and six open-ended questions meant to gauge teacher and coach insight on recent professional development activities and classroom implementation of the information presented in PD (see Appendix E). Data collected from the surveys was used to inform the next round of data collection and gave participants the opportunity to share information that they might have recalled following the previous interview.

These data collection methods allowed the teachers to report on the research question through a narrative of their experiences and perceptions of the relationships between coach intervention and teacher practices with the possibility of authentic demonstrations of change in teacher instructional skills in the classroom. The coach was able to report on PD interactions that

had occurred with the classroom teacher participants and the perceived outcome of that engagement with those participants over time.

Data Analysis

Two cycles of coding were utilized to identify initial codes and then determine emergent themes that arose out of the data during subsequent analysis. The first round of coding involved an analysis of the interview transcript data and information gathered through the teacher and coach surveys beginning with the process of open coding in order to determine the major categories of information gathered from the participants. This intense analysis involved conceptualizing and categorizing the data by deeply analyzing it in small pieces in an attempt to grasp the core idea of each part (Saldaña, 2013; Strauss & Corbin, 1990). Line-by-line coding for gerunds allowed the researcher to define implicit meanings and actions and suggest emergent links between the codes (Charmaz, 2014). For example, participants discussed such teaching/coaching actions as "analyzing," "co-planning," "modeling," and "discussing" as they described the activities that they engaged in during the process of professional development through coaching. These actions were individually coded in an attempt to identify specific interventions discussed as participants described the activities that influenced their instructional practices in some way. The researcher extracted discrete excerpts from the data in order to examine initial ideas that influenced a perceived change in teacher practice through intervention with a reading coach and began to organize these codes into meaningful categories until all data had been assigned an initial category.

Following the initial coding process, pattern coding was initiated on the codes developed from the teacher and coach responses during a second round of coding in order to group the initial codes into a smaller number of themes. Pattern coding, often used for action and

practitioner research, seeks to collect similarly coded passages from the initial coding process as a "stimulus to develop a statement that describes a major theme, a pattern of action, a network of interrelationships, or a theoretical construct of the data" (Saldaña, 2013, p. 212). This coding provided a type of method of cataloging the codes and assisted in a deeper exploration of the concepts extracted from the data of the participants.

Data from all sources was triangulated to corroborate the identified codes and themes while developing an understanding of how a teacher's classroom practices can be impacted through intervention with a literacy coach. This information was compared to the responses provided from the literacy coach participant to determine if the coaching interventions used were aligned to the perceived needs of teachers in an attempt to build an effective literacy coaching model. Following the data analysis process, a code book was developed and shared describing the codes that emerged from the data (Appendix F).

Informal member checks with participants were completed throughout the research process in order to verify the information gathered from respondents as well as to communicate the constructions that were developing as a result of data collected and analyzed with the goal of ensuring accuracy and consensus. To increase the quality of the data analysis, a peer review of the research process was conducted over several sessions and included an external check surrounding the data collection and analysis methods as well as a review of interpretations made and theories formed.

<div align="center">

Trustworthiness

</div>

Several procedures were implemented to ensure trustworthiness during this study. The researcher read over the data recursively with frequent debriefings with participants. Informal member checks with participants were completed throughout the research process in order to

verify the information gathered from respondents as well as to communicate the constructions that were developing as a result of data collected and analyzed with the goal of ensuring accuracy and consensus. Participants also had the opportunity to audit their case, provide feedback, and approve or amend conclusions drawn by the researcher. Additionally, member checks served as a way to identify and manage researcher bias during analysis of the data. These checks, coupled with the subjectivity statement in Chapter 2 explaining the researcher's association to the topic, allowed for transparency for potential researcher bias (Creswell, 2013; Merriam et al., 2015).

Peer reviews of the research process increased the quality of the data analysis and increased the trustworthiness of the study. Rich descriptions of the phenomenon under examination aided in conveying the actual situations that were investigated as well as the educational contexts that surrounded them. When used in combination, these strategies promote credibility and allow the reader to feel increased confidence in the overall findings (Creswell, 2013; Merriam et al., 2015).

Risks, Benefits, and Ethical Considerations

The participants were informed about the purpose of this research and were promised confidentiality. There were no foreseeable risks to the teachers who agreed to participate or those who decided not to be included in the study. No ethical issues arose during the study related to the researcher or the participants as all information collected was kept confidential and pseudonyms for the district, school, and participants were used. The benefits to the participants were indirect as their participation in this study will help advance the field of using literacy coaches to improve teacher instruction and will seek to enhance the professional development that they receive in the future. Through the identification of coaching strategies that teachers feel

make an impact on their classroom practices, this study informs the interventions offered by coaches on the elementary level with the goal of strengthening classroom instruction and improving student achievement.

Summary

The purpose of this qualitative case study was to explore the interactions between a literacy coach and three teachers as they engaged in school-based professional development and classroom instruction. This study applied Mezirow's Transformational Learning Theory and Knowles's Adult Learning Theory and examined perspectives of professional development and instructional beliefs and practices to explore the coaching actions that impact teacher instruction. These theories of adult learning provided a framework with which to analyze the data. The forthcoming findings are framed through a look at how the participants evaluated their past ideas and prior knowledge and reconciled those ideas with the new information provided by the coach through Transformational Learning Theory. Knowles's Adult Learning Theory was used to illustrate how a teacher determines something to be of immediate value through PD with a preference towards experiential work and problem solving. For example, some codes that emerged during analysis of data included "change," "clarify," and "modify," suggesting that teachers considered the new information in relation to past experiences and possibly came to a modified understanding. Other codes that emerged surrounding the interventions and motivation supporting change, such as "observations," "modeling," and "discussions," illustrated the desire of teachers to engage in hands-on learning that provided guidance on how to overcome the obstacles of teaching reading in elementary classrooms. These theoretical frameworks structured the analysis of teachers as adult learners whose change in instructional practices may be determined by the specific elements that their PD opportunities offer.

CHAPTER 4: RESULTS

The purpose of this study was to explore how literacy coaches use embedded professional development to change the instructional practices and beliefs of classroom literacy teachers with an analysis using the assumptions of Knowles's Adult Learning Theory (2005) and Mezirow's Transformational Learning Theory (1991). This study sought to explore interactions between three elementary classroom teachers and their literacy coach and the specific strategies, conversations, and interventions that brought about possible changes in teacher beliefs and practices relating to the teaching of literacy in their classrooms.

The study participants included one literacy coach with just over 20 years of experience in education and three classroom teachers with between four to six years of classroom teaching experience each. Participants were observed engaging in professional development together through Professional Learning Team (PLT) meetings. Individual interviews with all participants were completed in the week following the PD session with classroom observations in the third week to contextualize the information provided. These data collection opportunities, combined with Google surveys completed monthly by participants, were analyzed to answer the following research question:

1. How do the beliefs and practices of teachers change during the context of embedded professional development with a coach focused on literacy in a K-5 setting?

In Chapter 1, the problem, purpose, and significance of the study were described. Chapter 2 presented a literature review that synthesized the features of effective teacher professional development in general, professional development specific to literacy teachers, and literacy coaching as embedded PD. Chapter 2 also described the theoretical frameworks of

Transformational Learning Theory and Knowles's Adult Learning Theory that served as a framework for analysis of the data collected from the coach and teachers. Chapter 3 reviewed the methodology with the research design, research context, and data collection methods implemented to explore coach/teacher interplay in an attempt to identify specific coaching interactions tied to a perceived shift in practice. Data analysis, trustworthiness, and study limitations were also explored.

In Chapter 4, the findings from the qualitative investigation are presented through a within-case and cross-case analysis. The within-case analysis consisted of three case analyses with each case containing the coach plus a teacher. Cross-case analysis was conducted to examine commonalities in the data across all participants. This chapter provides a deep look into the thoughts of the participants on how coaching influenced the beliefs and practices of teachers through embedded professional development. The chapter closes by further exploring the themes that developed from within cases and cross-case analyses.

Within-Case Analysis

K-3 literacy coach Mrs. Smith said she loves coming to school to provide stability for a challenging population of children and to support their teachers as "she learns from them and she helps them learn." She brings extensive knowledge and experience to the position with 20 years of prior classroom teaching in first and second grades combined with a master's degree in reading (K-12). She works hard to build trust with her teachers, despite being new to the school and in her first year in the role of coach, and endeavors to enact a philosophy highlighting support and teamwork with teachers. This was evident as teachers discussed the positive relationships they had with her and the comfort they felt in asking for help while engaged together during PD. Mrs. Smith employs a number of coaching interventions such as co-

planning, classroom observations with feedback, and lesson modeling with participants and seeks to continually improve her strategies to meet the ever-changing needs of the teachers. She is part of a district cohort of literacy coaches that provides training on evidence-based coaching strategies and engages coaches in monthly professional reading opportunities to bolster the collective knowledge of effective coaching activities.

Participant #2, second grade teacher Mrs. Morgan, expressed her love for the students and explained that she enjoys coming to work every day to provide them with engaging lessons that help them meet their goals. Her coach described her as one of the "go-getters" who is always looking for ways to improve her instructional practices to meet the needs of all her students. Walking into her classroom, observers are able to see students actively engaged in meaningful small group activities geared towards their needs with Mrs. Morgan diligently moving from group to group. Her routines are well-established and students move independently between groups and activities, including those located in the adjoining rooms. Mrs. Morgan spoke candidly about the positive relationship she has with her coach and the collaborative work that they engage in daily and weekly to improve her teaching and grow her students as readers. She appreciates the shared understanding they have about the students and their needs due to the embedded nature of the coach's role within the school.

First grade teacher Ms. Bautista, participant #3, has seen positive growth with the reading achievement of her students following the implementation of a parallel block of instructional rotations with her first grade team of teachers and students. She loves "getting to do more fun stuff since they are really reading" and loves to see that "they get really excited about it too!" Her classroom is a warm and inviting place where students appear comfortable and move freely around the space within clearly established routines and expectations. Ms. Bautista shared that

she highly values collaborating with her coach and the other first grade teachers on a daily basis and was open about the benefits that this collaboration brings to her teaching.

Watching students grow and learn each day and "seeing that light bulb moment" is exciting to first grade teacher Ms. Rosela, participant #4, and drives the work that she does each day. Those "aha moments" as students grow and change throughout the first grade year on their quest to learn to read challenge her to look for new ways to meet their needs in the classroom. The enjoyment that Ms. Rosela receives from spending time with her students is evident as she laughs with them often and tells little stories of the antics that the students have engaged in during work time. She talked freely about the support that she receives from her coach and the other first grade teachers on a daily basis and feels comfortable reaching out with questions and for guidance whenever needed.

All four participants willingly shared details about their coach/teacher interactions and provided specific examples of this interplay and results of the collaboration. Analysis revealed multiple themes. Mrs. Morgan extensively described gaining competence in phonics implementation with her second grade students through coaching that contextualized PD, reinforced evidence-based practices in literacy instruction, fostered risk taking, and enabled her to translate theory into practice. Ms. Bautista detailed the refinement of the phonemic awareness instruction she provided for her first grade students through work with the coach that provided clarifying information and sought to translate theory into practice. Ms. Rosela developed her capacity for teaching small group reading with her first grade students through coaching PD that reconfigured her instruction, helped her gain confidence, supported program fidelity, and facilitated the translation of theory to practice.

Case #1: Coach + Mrs. Morgan

Contextualizing PD

The four second grade students sitting around Mrs. Morgan's small table in the back of the classroom eagerly wait for her to call out the next word. When she calls out "gym" they excitedly show how many sounds the word has on their fingers: /g/-/i/-/m/. "Three sounds!" one of the students calls out. Mrs. Morgan gives each of the students a pile of cubes and asks the students to put them in a line. She instructs them to say "gym" and pull down a cube for each sound that they hear. Together, the teacher and students work to write the correct letter for each sound. The students record the word on their phoneme-grapheme template. They wait for another word and repeat the process when Mrs. Morgan calls out "myth." Following the phonemic awareness and phonics activities, all four students delve right into the decodable text that she pulls out when they see that it is called *Gym Class*. "I know how to read these words!" one student says to the group as they all individually read the text aloud. Mrs. Morgan looks up and says, "They are so excited to be able to read!"

During all three interviews, Mrs. Morgan talked extensively about the changes that she had been making surrounding her phonics instruction through her work with her literacy coach, Mrs. Smith, particularly encompassing phonics implemented during small flexible reading groups. She described her previously held beliefs that the students needed to be reading grade level passages and answering questions during small group reading—whether they were truly able to read the text proficiently or not. Mrs. Morgan stated:

I think, in the past, I really felt like, okay, they need to read a passage and answer questions. They would need to read a passage to answer questions and, you know, that's how they read. This year I've seen the big importance of the phonics and phonological

awareness piece, which I don't think I focused on as much in my earlier years of teaching.

While Mrs. Morgan learned technical phonics content and basic processes for implementation during her recent LETRS professional development training, she did not feel prepared to implement quality phonics instruction with her own students. However, the training helped her recognize the importance of the phonics and phonological awareness components of reading instruction in the primary grades which she did not feel she focused on in the past. She identified the needs of her current students as aligned to the benefits of implementing these instructional components as a way to develop their reading skills. Mrs. Morgan was particularly interested in using decodable readers (decodables) to integrate grade level appropriate phonics skills into text reading. She expressed that she needed guidance and support in using the LETRS chart depicting a lesson plan format using decodable readers for planning her own small group instruction:

> There's a graphic, like a chart that shows the decodable lesson format that shows texts
> and here's what you do each day. So we looked at that as kind of a guideline for our
> planning. In the past I've reviewed the phonics strategies we're doing for the week and
> the spelling patterns but we would go into a text that would have it, but it wasn't full of it.
> These stories are giving them a lot more words with those patterns.

She talked extensively about the support that she received from Mrs. Smith in planning and implementing phonics instruction that was systematic and explicit, specifically through the use of decodables during small group reading, using her recently transformed beliefs of how students learn to read. She shared:

The coach has helped me develop a routine, like the guided reading lesson format, so that

was really explicit and systematic because it was, you know, same order everyday but the

content is changing. So it's kind of procedural like I'm in the routine of doing it. The kids

are in the routine of doing it. I think a lot of the growth is a result of the guided reading

planning that we've done because it was very intentional and we really use a lot of data.

Then we knew what we had to hit with this group and then the planning, how we were

going to hit it.

Mrs. Smith provided reinforcement of the technical knowledge gained through formal

LETRS training including the components of phonics instruction and the sequential scope and

sequence that builds on previously learned skills through a continuum of complexity. She shared,

"I feel like LETRS did a great job of going through the correct sound system but I think teachers

were getting a little bit confused. So we really had to go back and touch on some things." She

confirmed and clarified the information learned through PD with LETRS trainers during PLT

meetings, grade level planning, and individually with Mrs. Morgan when needed (technical

knowledge). Mrs. Morgan described this important work on the school level:

So we did go through like the science of reading, how to read, and the steps in how to do

that. But you know we learned it, but it wasn't like okay here's exactly, you know, like

here's what a lesson looks like. I don't know, sometimes it wasn't like correlated to okay,

yes, that's what you do and here's exactly what it looks like. I felt like that was

sometimes missing. That's where the coach has been able to actually do the modeling. It

was very helpful because it's like okay, I've learned these words and these things that

need to happen in a lesson, but it's like oh ok, like that is how it actually happens.

Mrs. Morgan stated this increased her confidence in her knowledge of what quality phonics instruction includes and helped her understand the way that the phonics skills build on each other to develop decoding skills in students in an effort to develop fluent readers. She was then able to see the need for phonics instruction to be consistent, systematic, and taught explicitly during classroom reading instruction.

While this information was included in the formal LETRS training PD offered by the district, the embedded nature of the coach allowed for follow-up teaching and review of the knowledge with the allowance of specific application to Mrs. Morgan's own students. For example, Mrs. Smith worked with Mrs. Morgan to analyze the DIBELS data for her students to determine their specific phonics strengths and needs in order to identify where phonics instruction should begin, along the scope and sequence, for each student. They collaborated to plan and implement quality reading instruction to build the decoding skills of the students and nurture their reading fluency through systematic phonics instruction using decodables. This real world application of the technical knowledge helped Mrs. Morgan better understand the concepts, why the implementation was important, and how to identify appropriate instruction for the level of her students.

Reinforcing Evidence-Based Practices

The added collaboration between coach and teacher started with the decision to co-plan a lesson framework for a week of small group phonics instruction. Mrs. Morgan spoke about the feedback that she received during the co-planning process, stating:

> I did a draft I guess of like a week's lesson plans for small group and I sent it to her making sure…confirming that this is what it would look like. This is when we would do this, and she kind of gave me some feedback on that so that I had a plan ready.

This immediate, targeted feedback provided Mrs. Morgan with valuable advice from the coach, with her specialized knowledge and experience with phonics instruction, that enabled Mrs. Morgan to make adjustments to her plans as needed. Her first draft of the lesson plans was an attempt to apply her new knowledge while the feedback from the coach allowed her to enhance the plans to ensure that they were directly aligned to the needs of the students, explicitly highlighted the sound/symbol relationship, and provided learning strategies geared towards active learning by the students. The feedback allowed for a collaborative exchange of ideas focused on evidence-based practices in order to enhance phonics instruction through the shared knowledge and ideas of the teacher and coach following formal phonics PD.

Mrs. Morgan also benefited from co-planning with the coach because it helped her understand evidence-based practices for the sequencing and pacing of the lesson that would encourage the results in student achievement that she desired.

> I would kind of want to go through the teacher manual for a lesson. It's one thing to read it, but like it's ok so here's an example of a day and kind of just go through where everything is in the book. Pacing would probably be a big thing because a lot of times programs come without, like, oh here's how long this chunk should take.

Mrs. Morgan said she found it difficult to fully discern the appropriate lesson sequencing and pacing following LETRS training without intervention from the coach. While the LETRS training did include Bridge to Practice support activities, they were not required by her district and many teachers reported skipping over them during the self paced modules. While Mrs. Morgan did not elaborate on her work in this area, she did rely on the coach to assist with planning phonics lessons that smoothly sequenced activities for an effective lesson with specific times allotted for each exercise. This guidance helped Mrs. Morgan see how to fit many

components of phonics instruction, such as the introduction of the new concept, time for guided practice, dictation, and text reading, into the time allowed for each small reading group. While these concepts were mentioned in LETRS training, Mrs. Morgan benefitted from the one-on-one application assistance provided by Mrs. Smith as the coach took the broad concepts from formal PD and brought them to life through explicit plans with the classroom teacher.

Mrs. Morgan and her coach worked together to expand on the LETRS decodable lesson format to allow for a clear plan for implementation. She reported:

So we've really gotten into the decodable model from LETRS, so where you have your decodable texts Monday and Tuesday. You have the first one and they're highlighting the spelling pattern. You're reading the individual words with the patterns. Then you're reading the whole text with the highlighted words. Then you transition to, okay, it's the same story we read but we're going to read the blank side where we haven't highlighted the patterns, to see if they can identify them without the deliberate highlighter and then kind of repeating it. Wednesday, Thursday with the new text and then by hopefully Friday we're fluently in the decodable so that's been the biggest coaching change.

Mrs. Morgan articulated how her small group reading instruction changed through co-planning with the coach from a focus on passage reading with comprehension questions to explicit, systematic phonics instruction embedded within decodable texts to practice the skill daily in context and encourage student reading fluency growth. The close collaboration with the coach provided opportunities for follow-up learning after the formal LETRS PD with coach/teacher discussions and co-planning with targeted feedback that supported immediate adjustments in technical knowledge and lesson planning. This tailored Mrs. Morgan's teaching to include evidence-based practices for phonics instruction through enhancement of the foundation

of knowledge gained during formal training and planned specifically for her current students through shared decision making with her coach. The close proximity to practice of the teacher learning fostered the atmosphere of team problem solving, the ability to see immediate impacts of the learning, and the opportunity to apply the concepts to real world problems. As a result, Mrs. Morgan became more confident in her knowledge surrounding what to teach and how to teach it when related to phonics instruction and was increasingly willing to pursue further coaching opportunities to enhance her teaching.

Fostering Risk-Taking

Coaching discussions integrated throughout the co-planning collaboration between the coach and teacher gave Mrs. Morgan the reassurance that she needed to take risks and make changes to her instructional practices.

> So we talked to her, because some of the decodable phonics passages for second grade were still too difficult for our lowest group so we don't, you know, we don't have access to that online because we're coded as second grade teachers. But she's able to give us that each week.

Mrs. Morgan felt more comfortable using below grade level materials when supported by the coach. When asked about what support she needed to make changes, Mrs. Morgan responded, "Kind of like approval in a way. I don't know…because if you make big changes to your lesson plans, they're like why? Like what are you doing? So we usually kind of talk about it in PLT like hey, this is what we've noticed our kids really need. Can we try..or what do you think we should try?"

These discussions gave Mrs. Morgan the assurance that she needed to try new strategies as she felt comfortable with the decisions if supported by the highly experienced and knowledgeable

coach. She also appeared to feel exonerated from possible criticism from administration if the coach was in agreement with the instructional practices. This support led Mrs. Morgan to completely change the format of her small reading groups from passages with questions to embedded phonics instruction using decodables. While she knew that the district approved of this type of instruction, she felt uncomfortable making such a big transformation of practice and felt more comfortable doing so under the close support of the coach.

Discussions focused on student data justified these changes and helped guide the co-planning sessions in an effort to target instruction to the needs of the students. "It's easy to say okay this kid needs help, but sometimes it can be hard to figure out exactly where the point is like this is where we need to start so that can be helpful," stated Mrs. Morgan. The specific discussions surrounding the implementation of the decodable lesson plan allowed Mrs. Morgan to gain immediate feedback thus enabling her to feel more confident in taking risks while making immediate changes to instruction:

> I started trying out the plan and then she came a week or two later to just kind of see how that format was going. But we also talked about it outside of that. She really liked the phoneme grapheme mapping with the cubes and the blending, the use of highlighters to explicitly get the patterns.

> Coach and teacher made tweaks as needed followed by further practice in the classroom

until Mrs. Morgan felt more comfortable with planning and implementation.

Translating Theory into Practice

Seeing the phonics instruction in action furthered Mrs. Morgan's instructional growth and proved to be powerful for her as she changed her beliefs and practices surrounding the use of the decodable lesson format in explicit small group phonics instruction. She explained,

Mrs. Smith let us watch her do a decodable ...like a rotation of Wall's small groups, and

that was super helpful because we had already…we had already been doing the plan, but

it was just helpful to watch her model it and just see another person doing it.

When pressed about what she thought was so important about seeing it happen she stated,

"What's written on paper, what I think it means might be something totally different than what

they think it means. And across our team I do..you know, everybody does things a little bit

differently so it's just helpful to see oh that's what that looks like, the pacing as well, like oh

that's how quickly that goes."

In fact, Mrs. Morgan identified this particular modeling opportunity as one of the most

influential coaching activities she had participated in during the school year. "I've really felt like

when Mrs. Smith came in and modeled those lessons, that was like one of the best things I got

out of this year." This modeling showed Mrs. Morgan how to perform each step of the decodable

lesson format, with both visual and verbal examples of what to do at each stage, a description of

each activity, and the rationale for its inclusion in the lesson (pedagogical knowledge). The

modeling also provided Mrs. Morgan with specific examples of how to adapt instruction in the

moment based on student response to instruction (situational knowledge). This exposure to

situational knowledge is difficult to address during formal group PD and was possible during

coach modeling to the benefit of Mrs. Morgan who gained essential experience in adjusting

instruction during implementation.

Through collaboration with the coach, Mrs. Morgan gained technical, pedagogical, and

situational knowledge and changed her beliefs and practices surrounding small group reading

instruction. Mrs. Smith reinforced knowledge of the scope and sequence of the phonics skills

learned during LETRS training (technical), modeled evidence-based strategies for

implementation (pedagogical), and assisted in determining the phonics skills appropriate for Mrs. Morgan's students (situational) through her assistance analyzing student data and the resulting suggestion that first grade decodable passages would be helpful for the lower students. In the past, Mrs. Morgan said she believed that students should be reading grade level passages and answering questions during small flexible reading groups regardless of their reading proficiency. Through professional development work with Mrs. Smith, she began to understand the need to focus on foundational reading skills (i.e., phonics) through explicit small group phonics instruction to grow her students as readers before a possible move to passage reading and comprehension questions. This shift in beliefs changed her small group reading instruction. Her phonics instruction became targeted, systematic, explicit, and intentional as she gained competence in leading students through the sequence of phonics skills, with integration into decodable texts, geared towards the reading level of each group. In turn, Mrs. Morgan said she saw growth in the reading fluency and word reading levels of her students that she reported were higher than in past years. She said this evidence of reading growth was exciting and helped her feel justified in her choices to trust in the risk-taking work with the coach to make the necessary changes that led to these improvements.

Co-planning, discussions, and modeling with Mrs. Smith allowed Mrs. Morgan to use the experience and expertise of the coach to plan and implement instruction based on evidence-based practices with guidance and support. These coaching strategies permitted her to bounce ideas off of Mrs. Smith within a risk-taking atmosphere, gain advice and assistance planning an effective sequence of phonics skill work, receive immediate feedback on her instructional attempts, and see modeled examples of the instruction in action. Having a school-based coach allowed extended time for Mrs. Morgan to practice implementation with prompt feedback and offered

opportunities for her to see modeled lessons with the coach, in an effort to translate theory into practice, which was especially helpful after Mrs. Morgan had a chance to try the new phonics decodable instruction with her students. Mrs. Morgan said this allowed her to focus on the parts of the small group phonics lesson that she might struggle with or have questions about after her own attempts at implementation. This changed Mrs. Morgan's beliefs about what small group reading instruction should look like and her instructional practices changed in response.

Mrs. Smith concurred with the positive changes in Mrs. Morgan's beliefs and practices after their work together and was able to articulate her observations when asked to discuss a time or two when she was able to intervene with a teacher and then saw how it changed the teacher's instruction or belief system. Mrs. Smith responded,

> I think that was made very clear when I helped Mrs. Morgan and second grade with their taking time back and saying let's go back to these decodable, first grade decodable passages, and then we actually took an activity out of LETRS. I went over how to do it, showed them what that looks like in a small group and that was very successful and they use it every day. I mean if I don't have it to them they're asking like do you have our passages, you know, so I really think they really saw a difference in what a decodable can do and what grade level reading can do versus the child being frustrated and the teacher just having to read it to the child.

Both coach and teacher were able to see a change in Mrs. Morgan's beliefs about what instructional components would be effective in teaching her students to read proficiently during small flexible reading groups and through their work together she was able to implement those evidence-based practices.

Case #2: Coach + Ms. Bautista

Refining Instruction

Ms. Bautista is seated on her stool with 18 first graders gathered on the carpet at her feet. "Let's do thumbs up/thumbs down for rhyming words," she says. "Wish, dish." "Sam, pan." Most students participate verbally by repeating the words and provide the correct thumbs up/thumbs down. The group keeps going with the teacher reinforcing the correct answer after each group response and only stopping to correct if the majority of students are wrong. In that case, she restates the two words and points out whether or not they have the same or different ending sounds. A cheer goes up from the students when Ms. Bautista tells them that they are going to move to finding the middle sound in a word. "Much! /m/ /u/ /ch/." The students aggressively punch high into the sky when they say /u/. "Tack! /t/ /a/ /k/." They punch the sky and yell /a/. "Now use the word 'tack' and add an s after the /a/." The group falls mostly silent while they consider this new direction. Most students struggle to say "task." "Take the word bed, add an n after the /e/." Very few students are able to say "bend." The teacher acknowledges that they are "tricky ones" and they would keep working on it during the week. The class moves on to clapping syllables in words and the students feel confident in their participation once again.

Ms. Bautista talked extensively during her three interviews about this daily Heggerty phonemic awareness routine that she implemented with her first grade students and the changes that she had made through her work with her literacy coach Mrs. Smith. Specifically, she described the misconceptions that she had about Heggerty instruction and how her beliefs and practices changed after PD with the coach, explaining:

> I feel like until this year I struggled a lot with phonemic awareness, like teaching it
>
> correctly, I guess. But we did get a lot of clarification on Heggerty and how exactly to do
>
> it this year, so I feel like because I'm doing better teaching it, yeah, my kids are doing

better. When I was doing Heggerty last year, I know I would try to really address every single misconception I heard in the moment, and it would drag out Heggerty. She told us it's supposed to be quick, you just keep going because it is so repetitive. Like, you do the same thing all week so it's normal on Monday for there to be errors and by Friday most of it has worked itself out. It's also all supposed to be oral so I've done better making sure we don't look at anything. We don't write anything, it's all just oral. I don't know why I didn't get that before, it's just all what you hear.

She talked openly about the support that she received from Mrs. Smith in clarifying her knowledge and understanding of phonemic awareness content (technical), corrections made in her instructional delivery (pedagogical), and the benefits this provided for her students (situational). While Ms. Bautista received group Heggerty training prior to the implementation of this instruction with students, she continued to have questions and misconceptions after trying out the phonemic awareness instruction in the classroom. The school-based format of the coach allowed Ms. Bautista to receive immediate feedback on her instructional beliefs and practices enabling her to make prompt adjustments to her practice. The cyclical nature of the coaching relationship allowed Ms. Bautista to attempt implementation of the phonemic awareness activities and return to Mrs. Smith as often as necessary to gain feedback on her endeavors. These opportunities for immediate observations with feedback, direct discussions with a literacy expert, and coach modeling of effective instruction would be difficult to obtain from coaches or PD presenters located outside of the school level and Ms. Bautista saw the value in this easy access to assistance during implementation. She shared, "I feel like if I have a question for Mrs. Smith I just walk down there or I wait for planning. I don't feel like there's anything I can't ask her." She went on to say "when we all came together she had us all do like the way we had been

doing and everyone was doing it differently because everyone can interpret it differently. She would say this is the way you are supposed to do it. So then she would model it and have us practice." Attending the formal Heggerty PD with her grade level provided a shared group foundation for implementing the phonemic awareness instruction with students while working with Mrs. Smith refined that practice for Ms. Bautista and increased the confidence that she had in her ability to provide that instruction for students in an effective way.

Clarifying Information

Ms. Bautista talked readily about the open relationship that she had with her coach and the ease at which they were able to candidly discuss all aspects of the teaching and learning experience including her Heggerty instruction:

> Just any question that I have, if she can't answer it, which most of the time she can, she will always find the person who can. We all had questions about Heggerty so she emailed and she got someone to come and do a mini training for us in PLT because we all had questions about it. I mean I talk to Mrs. Smith so much. If I need help I usually just say like hey I really need help with this and as soon as I say that she'll be, like, "Okay well what do you need? Do you want to look at my lesson? Do you have a specific question?" and she tries to help like that, but I mean I'm comfortable asking her.

Having the school based contact to either answer immediate questions or organize follow-up district PD improved the fidelity of program implementation and provided a sense of cohesiveness across the grade level and the school. Mrs. Smith was able to standardize the instruction that the teachers were providing with Heggerty (pedagogical) and ensured that PA activities across the school spiraled in an appropriate way. Also, the prompt attention that Mrs. Smith was able to provide for teachers during instruction prevented inaccurate information and

hand signals from being practiced with students as her clarification came quickly to ensure that changes could be made immediately.

At times, this close collaborative relationship with the coach went beyond looking for advice or clarifying procedural information and often appeared to function as a way of asking for permission or affirmation about what she was doing in the classroom. Ms. Bautista explained,

> I feel like teachers, a lot right now, is you're not really allowed to just teach the way that you think that you should be or make decisions for your class just because you think that it is the best thing for them. You have to make sure you're within the guidelines and all that kind of stuff or like if you get observed and you're not then, I don't know if trouble is the right word but it won't look good I guess.

Ms. Bautista felt more comfortable changing instruction or trying new things after bouncing the ideas off of the coach and receiving feedback. She appreciated being able to clarify the expectations for implementation to ensure that she was providing appropriate instruction for her students.

> Just getting to talk through my ideas and get input on them before I actually do them, and especially with Mrs. Smith, like she has more experience so I might have an idea, and she might be able to say like I've tried that and this is what happened. So it's helpful, I think, in that way especially since it's my second year in first grade, just being able to talk to someone who's done more things.

Ms. Bautista valued this close relationship and detailed small coaching conversations in the doorway of her classroom and complex discussions engaged in during grade level meetings. All of these discussions were beneficial to her skill advancement and often led to other coaching strategies that served to further her change in instructional beliefs and practices.

Translating Theory into Practice

Ms. Bautista's quest to refine her Heggerty instruction, following feedback from a formal administrative observation, included a great deal of coach modeling to illustrate implementation of the phonemic awareness concepts with appropriate teacher/student hand motions:

The hand motions were wrong because I'd never seen how they were supposed to be. And I think I used to try to make it take more time, like, I would like not over correct but if they got it wrong we would really go over it. And that's not what you're supposed to do since it's the same all week like it's ok if they make mistakes, like on Monday the hope is that by Friday they've got it down. So you just quickly correct it and keep going and I think I used to stop too much, and it would take like 20 minutes instead of the 10 minutes it takes me now.

When asked about the coach interventions that were done to help make the necessary changes to her instruction Ms. Bautista said,

She did modeling and then we had to do it and I think that's why it was so helpful because it was like…we literally had the Heggerty manual and she would say ok this is what you're supposed to do when you're teaching it. So you be the student. So we were the students and she was a teacher and then we took turns, everyone being the teacher trying it out and she would give us feedback on the spot. I think that's why I found it so helpful. I was seeing it and practicing it and getting feedback kind of all in one moment and it was really helpful.

In fact, many times throughout her interviews Ms. Bautista referred back to these coaching opportunities that allowed for her to more fully engage with her learning through practice as ways to ensure she was well prepared when she applied it in the classroom. She

described the pressure of trying to learn something new herself while trying to teach the students the lesson objective:

> I think it's just, like, it's hard to be learning how to teach something and trying to get them to learn what you're teaching. So it's like I feel like I'm not teaching it the best that I could, like the content, because I'm still trying to get in the groove with it and I'm trying to learn it so I might not be teaching it the best way.

She applied this notion to not only her Heggerty instruction but also when implementing small flexible reading groups and completing assessments with students. She had a desire to more fully understand the teaching process related to the strategy/program and wanted opportunities to try it out with the coach before implementing it with students. The embedded nature of the coach provided the time and space needed for Ms. Bautista to practice her instruction until she was confident in her ability to administer the activities to students in an effective way (pedagogical). She understood the value in being proficient with the concepts and pedagogical strategies related to the content before implementing with students to enable her full focus on teaching the content to students during the lesson. The guidance and feedback that Mrs. Smith provided during this practice was beneficial and allowed Ms. Bautista to cultivate her skills under the care of a literacy expert before introducing the concepts to the students.

This idea of encouraging teachers to practice their instruction before trying it out with students came up over and over again throughout Mrs. Smith's interviews as well. She said she found this coaching strategy to be exceptionally helpful with phonemic awareness and phonics instruction as a way for teachers to ensure that they had a strong grasp on the technical knowledge, such as how to say the letter and letter combination sounds correctly and choosing example words that were appropriate for the skill being taught, as well as the pedagogical skills

to implement it with students. She described an announced observation with another teacher where a lack of preparation and practice by the teacher was evident throughout the lesson, stating:

> The main focus of the feedback provided to her was to provide clear and correct letter sounds when teaching and using correct practice words in the phonics lesson. The teacher clearly didn't have words chosen to use for the lesson ahead of time. I stressed the importance of teaching the correct sounds. I said the sounds and we Googled videos to watch and listen to the sound. We then practiced them the correct way.

Mrs. Smith appreciated Ms. Bautista's desire to practice implementation of instruction, including Heggerty, and was open to assisting with this preparation whenever needed. Mrs. Smith shared, "sometimes I do see that we are not teaching those correctly, so I think just practicing, watch a video, prepare, prepare your words ahead of time that you're going to use in your lesson or your dictation sentences."

Through collaboration with the coach, Ms. Bautista gained technical, pedagogical, and situational knowledge and changed her beliefs and practices surrounding whole group phonemic awareness instruction. In the past, she had misconceptions about what phonemic awareness was and how it differed from phonics. She also struggled with the pace of the phonemic awareness activities and was confused about the role of the teacher during implementation regarding feedback and correction (situational). Prior to working with the coach, Ms. Bautista said that she was not providing explicit phonemic awareness instruction due to her lack of understanding of what it entailed. After being observed by administration and the literacy coach she was told that her technical hand signals were not correct and that she was spending too much time trying to over regulate the responses of the students. As these inaccuracies may cause confusion for the

students when they see different hand signals through engagement in Heggerty activities with other teachers, and in order to ensure fidelity of her instruction, working with the coach was an important step to standardizing and enhancing her instruction.

Through professional development work with Mrs. Smith, Ms. Bautista began to understand the purpose of phonemic awareness instruction and how it builds a foundation for proficient reading in her students. Her understanding of the specific components of the Heggerty program and how to implement them with students was clarified, thus enabling her to improve the quality of her phonemic awareness instruction as well as her confidence in its implementation. This shift refined her whole group phonemic awareness instruction. This instruction became more targeted, systematic, explicit, and intentional as she led the students through the appropriate sequence of phonemic awareness skills using the suggested pace and procedures.

Discussions and modeling by the coach, combined with observations and feedback, fostered trust between coach and teacher and encouraged Ms. Bautista to openly discuss her misunderstandings and freely observe and practice the steps of implementation. This promoted a vulnerability in Ms. Bautista that opened a space for her to ask for help and accept guidance from Mrs. Smith. The school-based embedded nature of the coach allowed her to ask many questions during coaching conversations, watch Mrs. Smith model the instruction with the teachers as students, and receive immediate feedback when she was observed trying it out herself in an effort to translate theory into practice. The close relationship between coach and teacher removed the boundaries between the two participants and encouraged a focus on instructional practice improvement for student benefit.

Ms. Bautista appeared to benefit from practicing the new skills with the coach and other teachers before trying it out in the classroom. Additionally, she appreciated the chance to be observed implementing the instruction with students in order to fine-tune her practices with the Heggerty hand motions and verbal cues. She also benefited from follow-up opportunities to watch a modeled Heggerty lesson or video after she had tried the lessons out with students. This allowed Ms. Bautista to focus on correcting the areas of implementation that she continued to struggle with to improve those specific areas of application. This changed Ms. Bautista's beliefs about what whole group phonemic awareness instruction may look like and her actual practices in implementing that instruction changed in response.

Mrs. Smith observed the progress that Ms. Bautista made with her explicit phonemic awareness instruction and made the connection with the ways embedded coaching was able to help guide this type of learning. She stated:

> The coach is there to clarify and share information through professional development. This can take place in school-based professional development, PLT's, team planning, and/or one-on-one planning. Some methods can be role-play, videos showing correct teaching methods and/or having teachers video their own teaching and self reflect. After clarifying of information, the coach will correct instruction through modeling and co-teaching with the teacher allowing the teacher to feel comfortable with new strategies and techniques. The coach then allows for practice time for teacher and students and observes to ensure corrections are made.

She believed in allowing teachers, including Ms. Bautista, the space to apply the information she provided for them during PD through opportunities to practice to ensure that they were proficient with the instructional technique making their instruction conducive to

producing student reading growth. Both coach and teacher were able to see a change in Ms. Bautista's beliefs about what phonemic awareness instruction entailed and through their work together she was able to implement those evidence-based practices.

Case #3: Coach + Ms. Rosela

Reconfiguring Instruction

Ms. Rosela brings three students to the back table, each carrying a dry erase board, a marker, and an eraser. She writes the word "soon" on the board and the students copy it down on their boards. "Use your chips to show how many sounds are in your word." Two students pull down three chips and the teacher corrects the third student who incorrectly pulls down four. "/s/ /oo/ /n/. The two oo's make one sound." She asks the students to think of a sentence with the word "soon." "The pet will come soon," says one student. The teacher writes the sentence on the board and has the students copy it. Ms. Rosela continues this process for several more words and sentences before she pulls out a decodable text and passes out a copy to each student. One student looks at the book and reads the title *That Looks Good*. The teacher asks what the students notice after looking at the pictures. "I see a boy making pizza!," one boy yells out. "There is a boy making cookies," another student says. Ms. Rosela points out the different sound that /oo/ makes in the words soon and good. The group chorally reads the story aloud. Ms. Rosela points out the /oo/ in the word "soon" on each page and relates it back to their word study at the beginning of the lesson. The group chorally reads the story again and then the teacher asks simple comprehension questions about the text. The students take their books back to their desks to read independently when three more students come to the table to begin their reading lesson.

Ms. Rosela was excited during her three interviews to talk about the work she had done to improve the quality of these small flexible reading group lessons through work with her

literacy coach Mrs. Smith. She described her prior experiences teaching small group reading as "basic" and the description she offered made her past small group reading instruction appear scattered and disorganized. She described what her reading groups used to involve:

> Probably them just looking at a book together and reading together and answering questions like paper and pencil kind of thing. Whereas now I switch books every like…we stay on a book for two days. In the past they probably would have done the same book for four days and then something different on Friday. I might have gone over a couple words but not as in depth as I've gotten now. Like, I might have had them write a couple words and like tell me a sentence with that word but not so much breaking it down with sound boxes, rewriting it, and thinking about the vowel sounds. It would have been a lot more basic of just writing down the word, repeating the word, and then making a sentence with the word.

She talked extensively about the support that she received from Mrs. Smith with planning and implementing systematic small group reading instruction targeted to the needs of her individual students. Ms. Rosela did not feel prepared to meet the literacy needs of her diverse set of students, despite having a masters degree in literacy, and felt pressure from administration to show reading growth with them quickly. However, she didn't know where to start. She shared,

> I feel like I'm teaching the same thing over and over again, but it's not clicking and then trying to find different ways to teach it to maybe get one kid to understand it. But then you've got three others over here and it's not clicking and finding ways to really differentiate and help and push them to get them where they need to be. I think with my lowest group is probably where I struggle the most.

Mrs. Smith guided her through the process of planning and implementing small flexible reading groups through collaborative analysis of student data, co-planning leveled activities to fit the needs of each group, and modeling the application of instruction within the groups. Ms. Rosela said, "I know Mrs. Smith is really good with the lower students so just like talking to her about what she's doing with her low kids and seeing what I can do and use with my lower students. Kind of just piggybacking off of her plans and tweaking those to meet my students' needs." This shared work gave Ms. Rosela a framework to use in order to proceed adequately through each step in bringing effective reading groups to fruition in that Mrs. Smith knew what questions to ask of Ms. Rosela, knew how to organize the groups and activities, and knew how to manage many activities going on in the classroom at one time. Ms. Rosela shared, "We looked at data and then we planned out fourth quarter with reading. Just like making sure I'm hitting every standard that we need to hit this quarter and asking questions about assessments." This structured coach/teacher work prevented Ms. Rosela from feeling overwhelmed as she had Mrs. Smith's support and direction during the change process and had the coach as a literacy expert to answer questions, supply resources, contribute ideas, and provide a model of evidence-based practices in literacy instruction on a daily basis. Ms. Rosela described her reconfigured small flexible reading groups in which instruction was more differentiated to better meet the needs of the students through the use of Wonders::

> So my high group might be on unit six and my low group might be on unit two and my middle group might be on unit four so I use that to kind of plan around it and that helps with the words in the phonics. So where we are as a class in whole group is one place but the low group is not ready so then I pull back and go to a lower unit in Wonders and pull

my stuff from there. Then for the middle group I go in the middle and I saw that from

Mrs. Smith how she would do it so I just kind of took her lead on it and talked with her.

This joint venture built Ms. Rosela's capacity to make decisions about the structure and content

of her reading groups and helped her be more self-assured in implementing the instruction with

her students as she had Mrs. Smith's model as an example of how to bring the content into her

own groups.

Gaining Confidence

The close bond that Ms. Rosela had with her literacy coach, Mrs. Smith, was evident

during her interviews and she was proud of how much she had grown through their work

together. She stated:

> Our team meets together pretty much daily. You know, we're always talking about what
>
> we're doing or how this certain kid is doing, what changes, and asking for suggestions.
>
> So we are just constantly talking and seeing what to do and making those changes. I also
>
> feel comfortable if I needed to ask for something. It would feel comfortable doing that as
>
> well.

 That comfort with her coach allowed Ms. Rosela the freedom to reach out for help in

improving the instruction that she provides for her students during small group reading:

> I asked about just different ways that she's teaching like different things that she's doing
>
> in her reading groups and always asking for advice and what she's doing with specific
>
> lessons.

Ms. Rosela was very candid when describing the brief coaching conversations that took

place in passing with the coach as well as the extensive discussions that took place during formal

PD sessions and PLT meetings. This continued support from the coach provided Ms. Rosela with

confirmation of the advancements she had made in implementing small flexible reading groups, advice on how to make improvements, and a type of consent to make those changes. Ms. Rosela no longer felt alone in her endeavors and had immediate access to a literacy professional capable of enacting instant changes to beliefs and practices through continued dialogue, shared planning of the materials and activities, and through the shaping of her implementation through coach modeling. She stated,

> Looking at their work samples and their data has helped a lot because I've been focusing on that this year and using that more to plan my lessons, especially my small group lessons. Since it's my first year in this grade level, I think like the resource sharing and the co-planning has helped me a lot and helped my kids to be successful, because, like if I didn't do that I'd really be swimming in the deep end.

This increased confidence gained through work with the coach emboldened Ms. Rosela to take chances with her small group reading instruction and encouraged her to put in the hard work necessary to continue to grow her capacity to implement quality reading lessons and activities during this time. She shared,

> I think that I've done a lot better of explicitly teaching what's on the plan and staying with it and being intentional about staying with the plan and meeting the standard that needs to be taught. Hitting like the base of each standard and then, just like being systematic in the lesson plan in a way that will meet each learner in my classroom.

She went on to share the results she saw with her class. "I hear them reading it and they're getting it. They'll be in the library and they want to pick up harder books and they're asking me what the words are. But then also like with progress monitoring I'm seeing a lot of growth." This

growth validated the changes that she had made in her beliefs and instructional practices surrounding her literacy instruction and encouraged continued collaboration with the coach.

Supporting Program Fidelity

Ms. Rosela described PLT meetings as a time when she could have discussions with Mrs. Smith about her students and their academic needs as a starting point in planning the targeted instruction that would meet the needs of her students. Ms. Rosela explained,

So during PLT, we're reviewing data and going over quarter plans, seeing where they are and making plans and reviewing data and just talking and discussing students and seeing what strategies to use next.

However, these discussions did not seem adequate in preparing Ms. Rosela to provide the quality reading instruction needed to grow her students as proficient readers. She talked about being new to first grade and needing support from the coach as she struggled with the knowledge of what to teach, how to teach it, and the sequencing and pacing contained within a quality plan:

Like, a couple weeks she let me just kind of go off of her guided reading plan and tweak them for my class and then based off of seeing how she would plan then I was better able to plan for myself. She was just kind of showing more like what actually, like, what specifics she put into her plans and then I was able to just kind of take her plan and then tweak it for my classroom because I just went to her and was like I'm doing it, but I don't think it's the right thing and I don't think..I don't see it helping my kids like can you help me just…can I just see what you're doing so that I can use that? So we did that for a couple of weeks and then I just went off on my own but you know, same format.

Despite the district and school wide expectations that she use a scripted reading program (Wonders), Ms. Rosela said she struggled with the curriculum and the immense amount of

components and information in the program. Therefore, in the past, she did not implement the program with fidelity and chose to pick certain activities and materials randomly from Wonders when she saw something that she thought might be helpful in a lesson. When asked what support she needed in implementing this reading program with her students she said,

> I wasn't in first grade last year, so this has kind of been new to me. So just kind of sitting down and planning and talking with them and seeing how they plan it and what they use and what they do so just sitting down and talking with them has really been it.

Ms. Rosela often had difficulty sorting through the comprehensive Wonders curriculum to identify the components that would be most effective for her students and appreciated the help that she received from her coach in planning and implementing lessons that would meet the needs of her students. Mrs. Smith's ability to clarify evidence-based practices through co-planning liberated Ms. Rosela from the confusion she was feeling about what to teach (technical) and how to teach it (pedagogical) and allowed her to focus on providing the instruction to students and making changes when needed for individual student needs (situational).

Translating Theory into Practice

Bringing the lesson plans to life in the classroom was the next challenge for Ms. Rosela. She had trouble understanding how to fit all of the components into the allotted time frame and was confused about how they all united together to form comprehensive reading instruction. She felt like she would benefit from watching how the coach implemented the plans with students so that she would better understand the pace and sequencing of all of the reading components. Ms. Rosela explained:

> I went in and watched her a couple times and then she's come in and watched me and really reflected back on that. So after the first session, it was kind of like, okay, you

come watch me and see like…she thought I did a good job, but she was kinda like you come watch me and see how I do it. I saw how she was very intent with what she was ….she had intention on what she was doing each part of the group but she was also very quick. Like, she made it fun for the kids and they moved at a fast pace but it kept them engaged and so I think that really I took that away from it. So now I'm doing a quick flash word game, then we're going into more writing with our sight words and then making sentences, then letters, and then we're going into reading our texts. Then we're going into answering questions about what we read and then it's time to switch groups and so I think it just helped me to do my…do each group with intention and make it quick and engaging.

Although the teaching of literacy continues to be an ongoing growing experience for Ms. Rosela, she felt more confident implementing the lesson plans after seeing them in action with the coach. She stated, "after the second session she could tell that I had really taken what she had done and applied it to my class in my groups."

Through collaboration with the coach, Ms. Rosela gained knowledge and changed her beliefs and practices surrounding small group reading instruction.

I've learned a lot from my coach. So seeing the things that she does, I want to do them, and so it kind of changed my mindset in a positive way as a teacher. And so I think that that is working. The PLT discussion, then the co-planning and then just looking at student data and student work samples and seeing what works for my kids specifically.

Prior to working with the coach, she did not feel that her small group reading instruction was systematic enough to guide her students effectively towards reading proficiently and was not sure that it contained all of the components necessary for her students to gain the reading skills

that they needed. Despite knowing that she was not implementing evidence-based practices, she did not know how to improve her instruction or how to use the Wonders reading curriculum in an effective way due to the vast amount of information included. She did not know where to start in making the necessary changes.

Through professional development work with Mrs. Smith, Ms. Rosela began to understand the need for her small group reading to be intentional, through the use of deliberate activities and purposeful teaching behaviors, with a constant awareness of how those methods will support student learning:

> I think that it just made me realize how important small group reading and small group time is and that when you're doing small groups just the importance of staying focused and focusing on the group that's with you.

This included planning lessons that were actively paced to encourage student engagement (pedagogical) and included evidence-based practices surrounding phonemic awareness, phonics, vocabulary, fluency, and comprehension (technical knowledge) in order to grow the reading achievement of her students. This intentional instruction also centered around providing targeted instruction directly to the instructional levels of the individual students when grouped with students of similar needs (situational). The strong teacher/coach relationship developed through the school-based role allowed Ms. Rosela to communicate the challenges she was facing in the classroom and initiated opportunities for co-planning, modeling, and observations with feedback, thus allowing her to look at her instruction in new ways and translate the theory that she was learning into practice.

Through her work with the coach, Ms. Rosela gained technical, pedagogical, and situational knowledge. Co-planning with the coach permitted her to see what to teach and how to

teach it while coach modeling was effective in helping Ms. Rosela make changes to her own instruction through the continuous cycle of modeling and practice. Her increased confidence was evident as she openly shared the improvements that she had made. This work with the coach changed Ms. Rosela's beliefs about what small flexible reading groups should look like and her actual practices in implementing that instruction changed in response.

Mrs. Smith also saw big changes in Ms. Rosela's small group reading instruction after their extended work together. Mrs. Smith stated:

I think that's been probably one of the biggest areas that she's grown in this year is the small group, because I feel like she has learned that phonics component, phonemic awareness component. Ok, I'm gonna do this for two minutes. I'm gonna do this for three minutes. You know, and I feel like that part of her lessons has really progressed. It's really going well.

Mrs. Smith discussed the coaching strategies that were beneficial to the process as they took place over an extended time and allowed for coaching interventions to be tailored directly to the needs of the teacher. She reported:

Plan, lesson prep with the teacher. And then the teacher teaches it. I observe it and then debrief, you know, about what you think went well. This is what I think went well you know and what you need to work on. And then we discuss those things, give the teacher a couple, you know, a week or two whatever, practice on whatever it was that we identified as a weakness and then follow back up with that and do that as often as needed.

Both coach and teacher were clearly able to see a change in Ms. Rosela's beliefs about what instructional components would be effective in teaching her students to read proficiently

during small flexible reading groups and through their work together she was able to implement those evidence-based practices.

<div align="center">**Summary of Within-Case Analysis**</div>

This section summarizes the findings of the within-case analysis. Table 2 illustrates the major themes found in each case and the remainder of this section reviews the themes and findings of the within-case analysis.

Table 2

Within-Case Findings

Teacher	Themes
Mrs. Morgan	Contextualizing PD Reinforcing Evidence-Based Practices Fostering Risk Taking Translating Theory into Practice
Ms. Bautista	Refining Instruction Clarifying Information Translating Theory into Practice
Ms. Rosela	Overhauling Instruction Gaining Confidence Supporting Program Fidelity Translating Theory into Practice

In the first case study, Mrs. Morgan changed her beliefs about the activities that develop students' foundational reading skills. She changed her instruction by moving from grade level passages with comprehension questions to systematic phonics instruction embedded in decodable

texts based on student needs. The coach supported these changes through the coaching professional development interventions of coach/teacher discussions, co-planning, and modeling.

In the second case study, Ms. Bautista changed her beliefs about what phonemic awareness entailed and why instruction in phonemic awareness is an important component to reading instruction. She changed her instruction from incorrectly confusing PA and phonics with imprecise activities to accurately implementing phonemic awareness instruction with fidelity. The coach supported these changes through the coach professional development interventions of coach/teacher discussions and modeling with observations and feedback.

In the final case study, Ms. Rosela changed her beliefs about the sequence and pace of an effective small group reading lesson. She changed her instruction from small flexible reading groups that were inconsistent and haphazard to those which were more intentional and targeted to the needs of the students. The coach supported these changes through the coaching professional development interventions of coach/teacher discussions, co-planning, and modeling with observations and feedback.

In all of these cases, the coach engaged teachers in reflection about their past practices and the impact that these had on their students in an effort to identify areas where change would benefit student reading achievement. She encouraged continued self-reflection throughout the process and enabled teachers to have agency over their learning and the changes they were making in the classroom. A few studies have emerged highlighting the fundamental importance of teachers having agency, or at least the perception of agency, to frame their own understanding of teaching and learning and encourage continued buy-in to the experiences (Desimone & Pak, 2017; Robertson et al., 2020). Mrs. Morgan, Ms. Bautista, and Ms. Rosela consistently asserted agency by asking questions of Mrs. Smith while situating discussions in the context of their

needs and those of their students. The collaboration was student data driven and the teachers were viewed as the decision makers over changes with the coach serving as a guide towards quality instruction based on strong technical knowledge.

The coach gradually released responsibility as the teachers were ready and offered continued support along the way. The professional growth that the teachers in this study reported is supported by research that indicates that teachers learn more when they are provided with this individualized coaching structure addressing their specific instructional needs (Goodnight et al., 2020; Matsumura et al., 2010). The coach/teacher interactions found in this study were aligned with research identifying critical features of effective coaching as those which provide active engagement for teachers, offer repeated opportunities for practice, and furnish teachers with follow up observations and explicit feedback (Cohen et al., 2017; Desimone & Pak, 2017; Dudek et al., 2019; Goodnight et al., 2020; Joyce & Showers, 2002).

In summary, this section reviewed the within-case analysis, discussed the three cases in depth, and attempted to answer the research question:

How do the beliefs and practices of teachers change during the context of embedded professional development with a coach focused on literacy in a K-5 setting?

Cross-Case Findings

The themes that emerged from the study data when looking across cases center around Proximity to Practice and include: Shared Responsibility, Coach As Sounding Board, and Scaffolded Coaching Cycles. These themes were present across all teachers and the coach, grounded in the within-case data, and situated across the cases. Specifically, elements of the scaffolded coaching cycles that Mrs. Smith used, the fact that she acted as a sounding board for ideas, and the shared responsibility between the coach and teacher to improve student reading

achievement facilitated the findings evident within the case of each participant and consequently form a reciprocal relationship across and within-cases.

Figure 2

Cross-Case Findings

Proximity to Practice

Shared Responsibility
Workload Sharing
Working with Students
Sharing Pressure & Accountability

Utilizing the coach as sounding board

Applying scaffolded coaching cycles to translate theory into practice
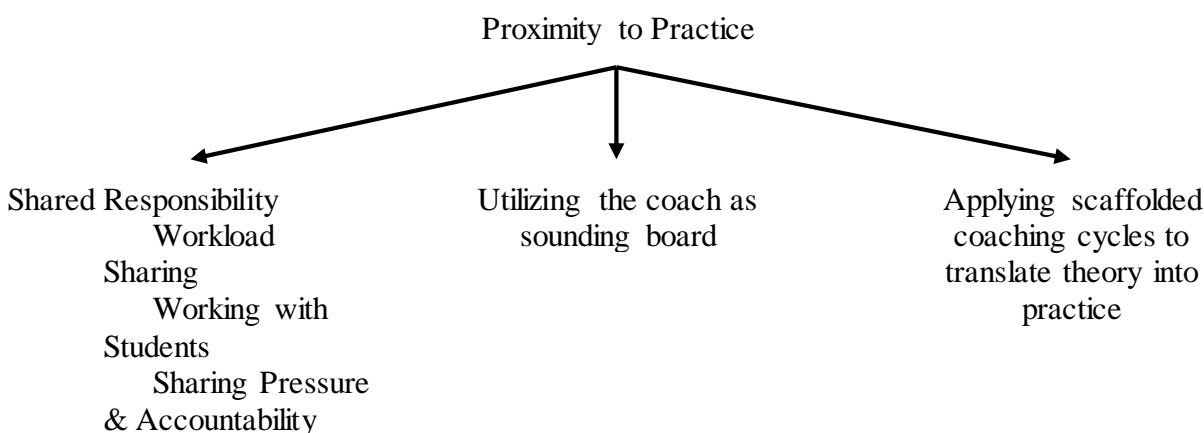
Proximity to Practice

Throughout this study, all four participants spoke to the benefits of having access to a school-based coach who was able to provide embedded professional development that translated theory into practice. This proximity to practice was a theme that ran throughout every interview, observation, and Google survey. The data gathered from the coach and teachers suggested that the entrenched nature of the coaching position was a fundamental factor in producing changes in the beliefs and instructional practices of the classroom teachers for a multitude of reasons.

Sharing Responsibility

Sharing Workload

The embedded nature of the coaching position allowed Mrs. Smith to share some of the workload with the classroom teachers such as in gathering resources, co-planning lessons, and researching new strategies and curriculum. This served an important purpose when looking at changing teachers' beliefs and practices. The coaching strategies involved in workload sharing

acted as a way for the coach to intervene directly into the planning and implementation of instruction with teachers and offer guidance and support surrounding the inclusion of evidence-based practices for reading instruction. Ms. Rosela shared,

> This year, since it's my first year in this grade level, I think the resource sharing and the co-planning has helped me a lot and helped my kids to be successful, because if I didn't do that I'd really be swimming in the deep end but it's been a really good year and I've really seen a lot of growth out of my kids and I think that, working closely with the coach and sharing resources has really helped. PLT discussions and discussing what we're planning and how we plan to teach it and the best practices for teaching. It has been beneficial.

Participant #2, Mrs. Morgan, also appreciated the workload sharing possible with the proximity to practice of the coach. When asked what coaches can do to really bring about a change in teacher instruction, she said,

> Helping do the planning part. A lot of times that's very overwhelming because it's like, okay, we're already doing plans for every subject so co-planning for sure and sitting down and actually laying it out. Without a coach it would be more overwhelming. Like we could do it. It'd be harder and you wouldn't feel as supported. Like here is the story. Like she would give us the material which is super helpful. Because we don't have access in Wonders we used a lot of first grade stuff in small group, because they were for our lower groups and we don't have access because we're second grade teachers. But she would print it out and put it in our box and I was like oh that's one less thing I have to juggle this week.

Participant #3, Ms. Bautista, talked about what teaching is like without a school-based coach from her experiences at a previous school:

It's a lot more stressful. Especially because that was my first two years of teaching. And I was planning everything by myself and when I had a question, I didn't, even if I went to someone it did not always get answered. So it just was a lot more work like I was doing a lot more work at home. A lot more questions, wondering if I was doing things the way I was supposed to. It was just like I've got to do something, so I guess, I will do what I think I'm supposed to be doing, and hope that it's right but it might not be.

This collaboration was by design of the coach who had worked to cultivate what she described as a "supportive partnership built on trust and a shared desire to meet the needs of the students". Mrs. Smith outlined some of the conversations she had with teachers to encourage them to reach out for assistance when she said,

I'm here to work with you. I'm a team member. You know, you need me to do something, to help you get this lesson finished, you know, let me know. I'll finish it for you. I'll fill in gaps in whatever we need to do together. That's kind of what I want them to know by the end of this year.

All three teacher participants expressed appreciation for her offer of help and felt comfortable reaching out for her input into their instruction. This workload sharing served as an entry point for the coach into the instruction of the teacher, thus allowing for the sharing of resources and strategies geared towards strengthening the teacher's evidence-based practices of reading instruction. Research shows that this approach allows for a contextually appropriate presentation of ideas that supports teachers' application of new skills with improved outcomes for teachers and students (Goodnight et al., 2020). Additionally, this curriculum collaboration

worked to build relationships between the coach and teachers and encouraged the continued sharing of ideas and instructional strategies over time with the embedded nature of the coaching position increasing feasibility.

Working with Students

Mrs. Smith's school-based coaching role allowed her to not only work closely with teachers but with students as well. This developed a shared interest in the growth of the students between coach and teachers where all parties were invested in improving the reading achievement of students. Ms. Bautista shared,

Mrs. Smith is willing to, like, if I have a kid who is not growing at all she's willing to sit with them and see like she'll observe them and see what she thinks they might need and sometimes we'll try like okay he's not moving in my reading group. What if he reads with you for a week? Maybe we can do something like that so she'll take my kids and see if that works.

Mrs. Smith enjoyed working with students and saw it as a way to connect with the teachers in a different way with the same goal of building coach/teacher relationships while improving student reading skills. "I'll help with your kids. I'll pull a group. So the groups I've been working with are the lowest groups," said Mrs. Smith. Ms. Rosela also discussed Mrs. Smith's work with students:

Mrs. Smith will pull my lowest group and work with them for a little bit just to differentiate what teacher they're getting and maybe she might teach it a little bit different than I would and that would help that student get that particular topic.

Mrs. Smith had a vested interest in the students and a direct view into their instructional needs, thus allowing her to target the assistance that she gave to teachers.

School-based coaching provided Mrs. Smith with a deep knowledge of the students and their data that would not be as feasible with off-site professional development. Mrs. Morgan was the first to delve deeper into this concept, stating:

> I think it has helped a lot that the coach knew our kids and she knew our data and she knew where they are, which allowed us to plan better. Because they came in and Mrs. Smith was so funny. She did the PAST, the phonological assessment, and she was like "Wow, I see it now like you're right." They are very low, and yes and so then we were able to like okay you're not exaggerating like yes they are that low. And when she was running a lesson with our kids so she knows okay my kids can do this so or they see the challenges that you're going to have with specific kids and then they can help you there. Mrs. Smith has done some screenings with them and it is really helpful to see exactly on an assessment, like here's where they got to, here's where the gap is. Because I mean it's easy to say okay this kid needs help, but sometimes it can be hard to figure out okay exactly where the point is like this is where we need to start so that can be helpful and then you know resources for interventions for activities we can do.

These experiences allowed Mrs. Smith to provide recommendations to Mrs. Morgan that were geared directly towards the gaps in phonics knowledge that she knew the children had after working directly with them, thus possibly making them more useful and effective. This bridged the gap between formal LETRS training and Mrs. Morgan's classroom instruction, a space for coaches that research has found to have an effect on exacting change on teacher practices surrounding literacy instruction (Carlisle & Berebitsky, 2010). The coach had first hand knowledge of the needs of the students which enabled her to suggest specific phonics activities and strategies directly geared towards meeting these needs thus supporting teacher change in

beliefs and practices. This finding has been echoed in a previous study of teachers' implementation of the LETRS PD. Specifically, Carlisle and Berebitsky (2010) found that 86% of teachers who were engaged in coach supported LETRS PD made changes to their teaching as opposed to 70% who made changes with LETRS training alone. While the researchers acknowledged that other factors may have influenced the outcomes, coach supported PD provides context for the professional development making it applicable to the needs of the teachers and students and allows for the knowledge learned from within to be applied directly. Mrs. Smith's direct work with students and teachers allowed her to reinforce PD concepts and scaffold implementation of those concepts within the classroom context. This redelivery of professional development may look different in application across district and individual schools as coaches are often left to decide what makes for effective redelivery (McLean et al., 2010). Mrs. Smith chose to reinforce LETRS PD through daily collaboration with the teachers, often through her work with their students.

Ms. Bautista also appreciated the experience and expertise that Mrs. Smith brought to their partnership with the daily work together being successful in helping her make specific and immediate changes to her instructional practices. She explained,

I mean, we look at the data to make new groups of kids for small group, like Mrs. Smith helped me group my kids to make sure that everyone was where they needed to be in working with people who need the same things as them. And then with Mrs. Smith, we'll kind of look at like if her kids did better at something than mine I'll ask like how did you teach that. So she's helped me a lot with how to make sure each group is moving along and come up with appropriate activities for them to do. I mean with Mrs. Smith it's more like she knows the things that have worked with her kids in the past in first grade.

Ms. Rosela also benefited from the embedded nature of the school-based coaching model, stating, "So I really think that is working, the PLT discussion, then the co-planning and then, just looking at student data and student work samples and seeing what works for my kids specifically."

These coaching strategies proved useful, according to the participants, due to the embedded nature of the coach PD with the teachers and coach acknowledging that using actual, meaningful student data would be harder to replicate through traditional PD and/or off-site coaching. This type of data driven coaching model focuses on creating a learning environment, informed by data, that is responsive to students as opposed to assuming deficits within the student or teacher (Bean et al., 2010; Glover, 2017). Mrs. Smith's close work within the classroom allowed her to support learning opportunities to raise achievement levels with a focus on adjusting existing teacher practices to meet identified teacher and student needs. Glover (2017) describes this process of coaches offering support to screen students for academic difficulty, identify individual student skill needs, groups kids for instruction/intervention, and monitor student response to instruction as a means to aid teachers in instructional decisions. This approach allows coaches to focus on scaffolding instruction for teachers in the use of specific assessments and instruction rather than a more broad approach seen from coaching and PD provided outside of the school context.

This profound familiarity with the needs of teacher and students was extremely beneficial to Mrs. Smith in that she was able to provide the teacher with recommendations of instructional implementation targeted directly to student needs rather than offering more broad advice and strategies that may be less effective in changing teacher beliefs and instructional practices and

ineffective in improving student achievement. Mrs. Smith spoke to the progress that this collaboration was able to produce:

I think the students have shown a lot of growth so I think that what we're doing is working. As we do analyze the data at this point in time, it really reflects what kind of year we've had and the growth that some of the children have made.

Sharing Pressure and Accountability

The teachers and coach who participated in this study all shared the pressure and responsibility for improving the reading achievement of the students in the school. The interviews with the teachers and coach suggested a feeling of "if the students don't grow then we are all to blame" type of attitude. Mrs. Smith described the process that each grade level went through to document student data on the school spreadsheet while intensely discussing student growth, needs, and next steps for instruction:

You know, when we took each and every student in the school, you know, at first, we were like "Oh my goodness," but you know what? That was very powerful for our school. I mean our school needed that because we have so many students who struggle. So I think being intentional is probably the key to all of this success for every kid. You know, what do you want them to walk back to their desk and be able to do? Or you know that kind of thing. What kind of explicit information or strategy or skill can we work on that they can take with them? And I think that comes through your coaching and modeling and sharing.

Ms. Rosela spoke to the vertical alignment evident in the work that they did together to form a cohesive plan for instruction across all grade levels through a shared responsibility to grow students. She particularly recognized "PLT discussions with my team and talking with

second grade and kindergarten and looking at the standards across all three grade levels" as particularly effective in designing instruction that would raise student achievement. Ms. Bautista agreed with the need to vertically align instruction as a way to merge efforts to grow students at the level expected by state and local officials and spoke to the pressure to do things in the exact ways that were expected, stating, "Like this year, I have a higher group of kids in my class and I would let them do stuff a little more independently, but I needed to check to make sure that was okay. That they weren't going to miss something." Mrs. Morgan also found this to be true when planning lessons for her students. When asked, "When you are ready to make some changes, what support do you often need?" Mrs. Morgan responded, "Kind of like approval in a way. I don't know, because if you make big changes to your lesson plans, they're like why? Like what are you doing?"

Teacher participants expressed that they felt pressure to plan and implement lessons viewed as "correct" by administration and were hesitant to make changes without consulting the coach. Mrs. Smith talked about the pressure put on her by the principal to make teachers perform. She felt that making genuine changes to teacher instruction took time, however, the principal often demanded a more immediate fix. "I feel like sometimes it's more of a rescue. Can you, can you go, go do this, go get..help the teacher. Go tell her what to do," shared Mrs. Smith. She said that administration appeared to maintain the belief that the coach could instantly change teacher instructional beliefs and practices, to produce changes in student reading achievement quickly, with the coach often playing a mediating role between administration and teachers. This shared pressure bound the coach and teacher together as they worked towards a common goal of planning and implementing instruction that would allow students to show growth on the school

data spreadsheet. This shared responsibility for student growth reaffirmed the commitment of all participants to work together to make the right decisions for the best results.

In summary, the proximity to practice nature of the embedded literacy coach developed a shared responsibility for the workload, student instruction, and pressure to raise student reading achievement while allowing the coach to customize the resources and instruction provided to teachers based directly on their needs and those of their students. Further research is needed to more fully understand the nuances of this shared responsibility between the coach and teachers and the implications of shared accountability to raise the reading achievement of students.

Utilizing the Coach as a Sounding Board

The embedded nature of school-based literacy coach Mrs. Smith allowed the teachers to bounce ideas off of her and receive immediate feedback which all three teacher participants said would not be possible with traditional PD or a coach located outside of the school setting. They often wanted to know, "Do you agree with what I am doing? Do you give me permission to do this?" They sought advice on how to help students who were not growing and gained clarification from the coach through discussions. This ease of asking questions with a school-based coach was exceptionally helpful to the teacher participants and they all spoke to the benefits of this immediate access to the coach. When asked "What do you think makes it different about having a coach right here all day on site?" Mrs. Morgan said,

> I mean they're just more available for your needs and for the kids. And it's a lot easier
> because you have a relationship with that person to ask questions, whereas like, if I had a
> coach at, you know, some other school that I've got to send an email to every time I have
> a question I'm probably not going to do it because I don't know it's just harder to do

virtually and, or I would do it, but you know you would have less conversation with a person who was not physically present and a person who doesn't know your kids.

Ms. Bautista also had a lot to say when asked about having a coach on site daily:

> I feel like we probably use them more. Like, you're saying like before that's kind of how my old school was. We didn't have a coach for everything there. And you feel like it's a little more formal when you do talk to them, or when you email them. And you don't want to just email for every little thing or set up a meeting for every little thing, whereas when they're here, I feel like if I have a questions I just walk down there or I wait for planning or if I need to send Mrs. Smith an email or talk to her I don't feel like there's anything I can't ask her I guess.

Ms. Bautista described her discussions with the coach in detail:

> But we kind of would just sit down and she would tell me what's worked for her, and then I would tell her like these are the kind of kids that I have and then we'd kind of talk through specifically, for my kids what she would recommend or she would say "Oh I have a group that's exactly like that. Here's what I planned. Why don't you try this this week and then we'll see how it goes and we can tweak it?"

Being new to first grade, Ms. Rosela appreciated using the coach as a sounding board as she requested assistance in finding new grade level resources, when planning targeted reading instruction, and during the implementation of those lessons. Ms. Rosela explained,

> I wasn't in first grade last year, so this has kind of been new to me so just kind of sitting down and planning and talking with her and seeing how she plans it out and what she uses and what she does. So just sitting down and talking with her has really been helpful.

This ease of access to the coach as a sounding board made it faster and easier for teachers to make changes in their beliefs and practices. They received immediate feedback and were able to schedule prompt follow-up as needed to implement the desired changes directly into classroom instruction.

Mrs. Smith agreed that having a coach on-site was a benefit to teachers and was able to speak in great detail when asked why having professional development embedded with a coach in the school was an integral piece to making a change in the beliefs and practices of literacy teachers, stating:

> You know, without that person there, would you be as reflective? Would you be thinking of these things if someone wasn't there and we weren't working through these things together? You know, if it wasn't my job to kind of bring these things to the table, then, would…would you do it by yourself? Would it be the focus of your classroom? So I think it, I think it helps to have that on campus with you in and out of your classroom as a partnership and that's what I would like for it to look like.

In summary, the teachers appreciated the daily opportunities to engage in discussions with the coach as they sought to gain feedback on their instructional thoughts and ideas. Mrs. Smith was always open to answering questions, investigating curriculum and strategies, and going deeper with advanced coaching strategies in order to support teachers with making changes in instructional practices and the embedded nature of her role made that possible. Bean et al., 2010 also found that teachers valued the assistance, information, and attention received from coaches and that teachers profoundly noticed when the support was withdrawn. Interestingly, the researchers in that study found that teachers recognize when the coach spends less time on coaching and more time on administrative tasks and that teachers often develop a

negative view of the coach as a resource in response to those actions. In fact, in those instances, fewer teachers believed that the coach could help them solve instructional problems or that the coach understood their students' needs (Bean et al., 2010). When triangulated with an increasing body of research suggesting that increased opportunities for literacy coaching leads to positive changes in teacher instruction, and often student reading achievement, it is essential that the coach's time be prioritized in favor of coaching (Elish-Piper & L'Allier, 2011; Robertson et al., 2020; Walpole et al., 2010).

Applying Scaffolded Coaching Cycles to Translate Theory into Practice

Being a school-based coach allowed Mrs. Smith to engage with teachers on a more enhanced level than traditional PD or district-based coaching would allow. While she acknowledged that the coaching activities that she engaged in were not quite as advanced as she would like to see due to being new to the position, she knew many evidence-based coaching interventions and had aspirations to implement more of them in the coming year. As often as possible, she implemented coaching cycles centered around the "I Do, We Do, You Do" scaffolding perspective involving coach modeling, co-planning, co-teaching, and teacher practice with observations and feedback as a way to scaffold new strategies and instructional practices for teachers. Mrs. Smith said,

> I think for this year, for me it was just learning my cycle, what does my cycle look like. And just moving forward with talk, go back in and touch base with the teachers again. So I'm learning that I probably should model the lesson first. Then maybe help with them preparing the lesson and prep with the lesson and then having them to teach the lesson. So just getting in that cycle and having the time to do all three things with the teachers that need it.

The embedded nature of the coaching role made this more possible through long-term coaching cycles, although Mrs. Smith reported that these advanced coaching interventions were not always possible despite her embedded status:

> You know, there's more than one so you're looking at a three-part cycle, with more than one person, and you know, and then it just, like it falls apart sometimes because the time is not sacred. So many other things, as you know, taking the priority at times.

While Mrs. Smith described times when she was reassigned to perform duties other than coaching during the day, being entrenched in the school with the teachers gave the coach more of the time and space to build the relationships and knowledge necessary for this work, both with the teachers and students, and provided enhanced opportunities for advanced coaching due to the year long, daily duration of the interactions.

Teachers described such intense pressure to advance student academic growth quickly that they wanted the coach to tell them exactly what they needed to do to make that happen. They wanted to know what quality literacy instruction should include, evidenced by the desire to engage in co-planning, unpacking the standards, and coach discussions, and what that looks like in practice through modeling, observations with feedback, and discussions. All three teacher participants highlighted coach modeling as a strategy that they found extremely beneficial in changing their instructional beliefs and practices and translating theory into practice. When asked what types of things she would like her coach to do differently, Ms. Rosela said,"I think more modeling and giving feedback and me having the opportunity to watch her and her coming and watching me and giving feedback and then just talking and modeling for each other really." When asked to provide insight into why modeling is so effective, Mrs. Morgan stated, "I think a lot of times like meaning over paper. Like what's written on paper, what I think that means

might be something totally different than what they think it means. And across our team I do…you know, everybody does things a little bit differently so it's just helpful to see oh that's what that looks like. The pacing as well, like oh that's how quickly that goes."

Ms. Bautista pointed to the many variables in the teaching and learning process, specifically within small flexible reading group instruction, as one of the reasons why she desired to see these lessons modeled by the coach:

> The whole group stuff that we're all doing, that's something where if she just tells me like "Hey, do this instead," I feel comfortable doing that because it's usually just a simple change where in small groups I feel like there's so many variables and so many different ways that I kind of want to see how..like seeing someone else do it I feel like it could help mine be better.

She went on to say, "we modeled the small group, like in PLT so it wasn't with kids, it was with each other, but just seeing the activities and stuff that she did. So, yeah, I think just anytime with the modeling is what I prefer and what helps me the most."

An analysis of the collected data showed that daily learning interactions with the coach raised the confidence of all three teacher participants in the methods and strategies that they were using which made them more likely to try new things in the classroom. Mrs. Morgan shared,

> I think it's definitely made me more confident in teaching literacy. I've always been a math person by preference so, working with a coach has made me feel better about that and guided reading has always been an area where I really want to do it well. But some years I'm like I just know that I'm not doing what they need, so this was the first year that I really felt like I was giving them exactly what they needed because I felt like I knew how to figure out what they needed.

When asked to compare her current work with the coach to prior years without coach PD on the school level and whether there was a difference in her confidence, Ms. Bautista responded, "Yeah. Definitely. It was just like I've got to do something so I guess I will do what I think I'm supposed to be doing and hope that it's right but it might not be."

While Ms. Rosela's small group reading groups might have been described as basic and chaotic in the past, her work with the coach gave her the tools to provide more targeted instruction in which she appeared more confident in her methods:

> It's just made me realize how much the group…small group differentiated groups can push the students to grow. So it just helps me to really, really, stay focused, stay on the plan, and just make sure I am hitting that..I'm hitting them everyday..

The data collected suggested that the coach helped the teachers be more intentional and systematic in their instruction. Teacher participants suggested that the coaches developed a cohesive plan for instructional implementation in the classroom, within the grade level, and across the school through a focus on teaching to the standard. The embedded nature of the coaching role provided many observation opportunities where the coach could look for trends and find ways to address them. Mrs. Morgan reported that

> There was one day I was doing a lesson in here and Mrs. Smith was just like "Oh, you could also do it this way," and I'm like that would be easier than the way I'm doing it so that was like complete…Not like you're doing it wrong, but you know, like here's some other ways you could do it.

The close proximity to practice of the coach allowed many of these "quick fixes" to happen with both coach and teachers reporting that this allowed for information to be disseminated more efficiently, for questions to be answered immediately, and for the coach to

promptly identify areas for improvement, thus driving the instruction she provided for teachers. The embedded nature of the coach allowed teachers time to practice new skills with immediate feedback thus encouraging change through a type of trial and error system with support from an expert. While the teachers had general knowledge from intense LETRS PD, Heggerty training, and college literacy training, they all required follow-up assistance translating that theory into practice. Multiple opportunities for coach modeling allowed teachers to view the target instruction at all different points in their implementation process making change more accessible. The coach brought cohesion across the school through her work with multiple grade levels with Ms. Rosela stating that it has "helped our whole team be on the same page" and Ms. Bautista adding "she gives us a lot of guidance on what we should be doing."

In summary, the coach implemented scaffolded coaching cycles with teachers to guide them in translating the theory learned in PD into classroom practice. The close proximity to practice provided the opportunity for the coach and teachers to engage in coaching cycles that included data discussions to drive instruction, co-planning, modeling, and observations with feedback geared directly to teacher needs. This raised teacher confidence in the teaching of literacy, improved the systematic and intentional nature of their instruction, and brought a feeling of instructional cohesion in each classroom, across grade levels, and throughout the school. These findings support research on the importance of extending literacy teacher PD to provide more opportunities for work with pedagogical and situational knowledge such as those offered in the coaching cycles in this study. Gore and Rosser (2020) suggest that pedagogy-focused PD is an essential means of improving teaching on the broad scale necessary to compel widespread improvement of teacher instruction and student outcomes. They argue that "an approach to PD that moves beyond a focus on content, to engage teachers in powerful professional learning

across traditional boundaries, makes a significant contribution to school improvement" (Gore & Rosser, 2020, p. 11). Many other scholars concur and call for more opportunities for PD, such as in this study, that accentuate the cyclical nature of developing knowledge through both explicit instruction and the space to practice the new concepts and skills using real students under the guidance of a literacy expert (Cohen et al., 2017; Moats, 2014; Tortorelli et al., 2021). This correlates with the extensive research completed surrounding the effective characteristics of professional development. Recent studies that have identified the general characteristics of effective professional development (reform type, content focus, active learning, coherence, duration, and collective participation) support the use of scaffolded coaching cycles that translate theory into practice as this work by the coach exemplifies these components (Carlisle & Berebitsky, 2010; Desimone et al., 2002; Desimone, 2009; Desimone & Pak, 2017; Gore & Rosser, 2020).

In review, the close proximity to practice that embedded coaching provides fostered a shared responsibility between the teachers and coach to carry out the expectations of administration, as well as local and state officials, surrounding the implementation of the literacy instruction that will provide student reading growth and increased student reading achievement. The embedded nature of the job made the coach easily accessible to the teachers throughout the day thus allowing for the continuous exchange of ideas and new information. This close long-term arrangement encouraged the use of advanced coaching interventions, such as coach modeling, suggested to be effective in transferring professional development learning into practice, potentially changing the beliefs and instructional practices of teachers.

CHAPTER 5: DISCUSSION

Elementary schools across the country have been equipped with literacy coaches as a resource to improve teacher literacy instruction in an effort to increase student reading achievement. The use of literacy coaches holds significant promise considering the amount of support needed for teachers to vertically transfer new strategies and instructional practices from professional development into classroom instruction. However, the process and specific content of effective coaching professional development activities are often less clear and fail to document the relationship between coaching activities and change in teachers' beliefs and reading instruction.

The purpose of this case study was to explore the nuances of the literacy coach and teacher interactions that brought about a change in classroom teacher literacy beliefs and practices through embedded professional development on the school level. Study participants included three classroom teachers with between 4-6 years of teaching experience and their highly experienced literacy coach with over 20 years of instructional experience. All participants were engaged together in active literacy PD on the elementary level throughout the study. Participants were observed during classroom literacy instruction (teachers) and when engaged in professional development together with their coach (teachers and coach), all participated in individual interviews, and all provided additional information in brief Google surveys. The following question guided this study:

 How do the beliefs and practices of teachers change during the context of embedded professional development with a coach focused on literacy in a K-5 setting?

In Chapters 1 and 2 the background of the topic was discussed and information was provided outlining the need for additional research to be completed. Chapter 3 described the

methodology used in the study. In Chapter 4, the findings from the data for each of the participants was shared through a within-case analysis and the chapter concluded with a cross-case analysis exploring the themes that emerged across the participant data. Chapter 5 provides a discussion of the findings using Transformational Learning Theory and Knowles's Adult Learning Theory as frameworks and includes important conclusions, implications, contributions to the field, and recommendations for future research that emerged as a result of the study.

Findings

The professional development offered to teachers by Mrs. Smith was a clear illustration of the ways that literacy coaching can embody the six characteristics of effective PD (reform type, content focus, active learning, coherence, duration, and collective participation) as outlined in extensive general PD research. Desimone et al. (2002) found these six key features of PD related to increases in self-reported knowledge and skills by teachers, as well as a change in teaching practice, which relates directly to the findings of this study. All three teacher participants described PD interactions with Mrs. Smith focused on changing specific instructional practices through reform type activities. This often took the shape of reciprocal discussions with the coach and peers, coach modeling, and observations with feedback that were continued over days, weeks, and months in an effort to compel changes in literacy teacher practices and reform the reading instruction offered to students (reform type, collective participation, and duration). Mrs. Smith worked throughout the school year with Mrs. Morgan to reform her reading groups through the infusion of phonics skills within the context of leveled reading. She supported Ms. Bautista in refining her phonemic awareness and worked with Ms. Rosela to reconfigure her reading groups making them more systematic and targeted towards individual student needs (reform type and duration). They described collaborative work,

including a shared literacy content focus, with their grade-level team and coach where participants engaged in active learning surrounding curriculum practice and implementation vertically aligned within the larger school setting (active learning, collective participation, cohesion, and content focus). Mrs. Smith clarified technical knowledge surrounding phonemic awareness and phonics for the teachers and extended the learning from LETRS (Morgan), Heggerty (Bautista), and teacher preparation (Rosela) by translating that content knowledge into effective reading instruction (content focus). The coach was able to supply a coherent set of instructions, ideas, and interventions that provided consistency across grade levels, and throughout the school, thus increasing teacher buy-in and strengthening the foundational reading activities provided for students (coherence). Mrs. Smith guided Mrs. Morgan's second grade team in providing systematic phonics instruction embedded in small flexible groups to ensure consistency across the grade level in a way that aligned with Mrs. Morgan's changing beliefs. She worked with Ms. Bautista to refine her phonemic awareness instruction to coordinate it with other teachers across the grade level and school. She guided Ms. Rosela in providing structured reading group instruction that followed a systematic pattern based on student needs that progressed with them at their own pace (coherence). The participants engaged in coaching interventions together which were based on active learning such as modeling, observing and offering feedback, and group discussions (active learning and collective participation).

Throughout the study, Mrs. Smith delivered PD through coaching interventions that were solidly based on characteristics of effective PD and the tenets of adult learning theory and the participants reported that they acquired development in their knowledge and skills surrounding literacy instruction as well as specific changes in teaching practice. These findings are especially promising when coupled with research suggesting that PD experiences that share all or most of

these characteristics have a considerable, positive impact on teachers' instructional practice and student achievement (Desimone et al., 2002; Garet et al., 2001). While robust direct evidence supporting these claims is somewhat lacking, designing professional development that embodies the characteristics of effective PD clearly contributes to positive experiences that provide the foundation for teacher learning and growth (Desimone et al., 2002; Garet et al., 2001).

Expanding on the effective characteristics of teacher professional development, it is essential that we better understand under what conditions and how teachers learn. Opfer and Pedder (2011) advocate for the recognition of teacher learning as a complex system that "involves many processes, mechanisms, actions, and elements and is difficult to specify exact outcomes in every instance" (p. 379). Teacher learning is hard to quantify as it is dependent on the uniqueness of the context of the person and the learning environment. Throughout the study, all three teacher participants discussed changes they had made, or were in the process of making, in their beliefs and instructional practices surrounding literacy instruction through embedded PD with their coach. Mrs. Morgan changed her beliefs surrounding evidence-based practices for building the foundational reading skills of her students during small flexible reading groups and her instruction changed through the use of systematic phonics instruction through decodables as a result. Ms. Bautista changed her beliefs about what phonemic awareness entails and modified her whole group PA instruction to provide explicit, uniform activities that increased the success of her students in response. Ms. Rosela changed her beliefs about the components involved in providing students with effective small group reading instruction and completely changed the instruction she provided to her students during this time to make it more intentional and targeted to individual student needs. All three teacher participants credited Mrs. Smith with supporting these changes through a close proximity to practice and a shared investment in them and their

students. A deep analysis to identify effective coaching patterns found that the teachers in this study benefited from interventions related to guided practice punctuated by regular and meaningful consultations with the coach. The coach worked to translate the technical knowledge learned in PD into practice by cyclically returning to the teacher to continually advance the learning and implementation at a pace appropriate for the teacher's knowledge and skill level. This takes into account the multidirectional processes of teaching and learning, that involve movement in several directions simultaneously, and provides an understanding of a process of how teachers can learn and change their beliefs and practices (Cohen et al., 2016; Hudson et al., 2021; Moats, 2009, 2014; Opfer & Pedder, 2011; Tortorelli et al., 2021).

The embedded nature of the coach directly positioned her in the space where the necessary work could be done to support teachers in the vertical transfer of knowledge Joyce and Showers (2002) described as necessary, when taking knowledge from PD into the fluid nature of the classroom context, and supporting a change in practice. Literacy coaching works to guide the teacher towards the essential attainment of executive control over the new information or strategy including the ability to use it appropriately through adaptation to the students and the classroom setting (Joyce & Showers, 2002). Scholars suggest this on-site close proximity to practice for coaches as a way of meeting teachers "where they are" in their own contexts of practice to help teachers learn through modeling and demonstrations of practices (Dudek et al., 2019; Neuman & Cunningham, 2009). The accessibility of Mrs. Smith on a daily basis allowed teachers to extend the learning from PD into practice with guided modifications to fit the needs of the specific teachers, classes, and students. Teacher participants felt free to ask for advice on strategies and activities to use based on student data and gained immediate assistance with co-planning, coach modeling, and observations with targeted feedback to identify specific

adjustments to make that would directly align the teaching and learning to generate student growth in reading achievement. These coaching practices took the broad concepts from general PD experiences and tailored them into appropriate, purposeful practice for the students in question and gave the teacher the necessary knowledge and skills to use them effectively. The changes that teacher participants discussed during their interviews were directed through intervention with the literacy coach who used her prior teaching experience to inform the suggestions and instruction provided to teachers when transferring knowledge from PD into classroom practice. Furthermore, when framed through the lenses of Transformational Learning Theory and Knowles's Adult Learning Theory, it is evident that the teachers as adult learners and the PD offered to them from the coach operated under the tenets of these theories and rendered change in teacher instructional beliefs and practices.

Transformational Learning Theory and Knowles's Adult Learning Theory provided a framework through which to examine the findings of this study. Through their work with the coach it was clear that all three teacher participants questioned their prior held thoughts, beliefs, and actions and examined information provided by the coach from a new perspective, highlighted in Transformational Learning Theory, as the teachers and coach worked together to transform literacy beliefs and practices in the classroom. These transformations involved working within the coaching context for sustained duration as highly suggested in the coaching literature (Desimone et al., 2002; Desimone, 2009; Desimone & Pak, 2017; Garet et al., 2001; Penuel et al., 2007). The embedded nature of the coaching practice provides follow-up support that consistently translates knowledge acquisition into changes in teacher instructional practices (Shernoff et al., 2017). Coaching entrenched in teacher specific classroom contexts allows for a focus on immediate teacher, student, and classroom challenges, thus supporting growth in

teacher knowledge and promoting transfer of skills directly into classroom practice (Dudek et al., 2019). Through sustained work with the coach, Mrs. Morgan reevaluated the materials and activities that she used in small flexible reading groups and made dramatic modifications based on this collaborative work. She adjusted her beliefs that her second graders would all come to her group ready to read passages and answer comprehension questions and she just needed to help them struggle through the grade level reading if they had difficulty. Mrs. Smith helped her realize that building foundational reading skills was an essential part to these groups and if they could not read grade level text they would not learn to do so simply by being exposed to it daily during groups. After this change in beliefs, the coach and teacher worked together to plan and implement lessons using systematic phonics instruction embedded in decodable texts. Through this process, Mrs. Morgan said that she began to see her students grow as readers, leading to her continued buy-in for the new practices and extended work with the coach.

Ms. Bautista reassessed her knowledge of what phonemic awareness includes and how she was implementing this instruction with her students through her work with the coach and made explicit modifications based on this collaborative work. She clarified her prior beliefs that phonemic awareness was the same as phonics and that students needed to be focused on writing letters and words during this instruction. Mrs. Smith helped her realize that phonemic awareness is all done orally and that this learning allows students to hear and manipulate sounds before working with letters and words. The coach emphasized the importance of PA work and its role in helping students learn to read and write effectively. After this change in beliefs, the coach and teacher planned and implemented PA lessons that were systematic, intentional, and accomplished within the fidelity of the Heggerty PA program. Ms. Bautista learned to produce the correct hand signals involved in the program, developed her knowledge of the sequence that

students should be exposed to the content, and was able to accurately distinguish between PA and phonics when planning and leading her students through lessons. She observed that her students made gains in their ability to manipulate the sounds in words and syllables and attributed this to the improvements she had made in her PA instruction after working with Mrs. Smith. Through this process, Ms. Bautista saw that the coach had the ability to amend her teaching in specific ways that would greatly benefit her students.

Ms. Rosela reexamined the materials, methods, and content of her small flexible reading groups through her work with the coach and made major changes to this instruction as a result. She developed her beliefs about the importance of the lessons during this time, the explicit content that must be included to grow her students as readers, and the differentiation possible for meeting the individual needs of the students. She said that she did not feel that she had a well developed plan for these groups in the past and that she was just pulling random materials and activities in order to fill the time. Mrs. Smith helped her realize that the work done during small flexible reading groups holds the potential to make immense student gains in reading and that the planning and implementation of these lessons must be intentionally made if students are to gain the skills necessary to be proficient readers. After this change in beliefs, the coach and teacher collaborated to develop more rigorous lesson plans that used a variety of appropriate materials including decodable texts, systematic phonics activities, and phonemic awareness practice. Activities and materials were intentionally planned for the skill level of the individual groups and were sequenced and paced in ways that kept the students engaged. Through this process, Ms. Rosela saw her students grow in their reading skills using the intentional format developed through her work with the coach and she continued to look for ways to continually improve what they had started together. All three teacher participants transformed their instruction in ways that

increased the benefits of their instruction for students and epitomized the tenets of

Transformational Learning Theory.

Developing a relationship with the coach based on trust was essential for the teacher

participants as they engaged in this transformative work. A strong coach/teacher bond facilitates

a culture of reflection in which effective coaches listen, observe, and support instructional

practices designed to improve student reading outcomes (Desimone & Pak, 2017; Garet et al.,

2002; Neuman & Cunningham, 2009; Penuel et al., 2007). Teacher participants discussed Mrs.

Smith's extensive teaching experience and her ability to model effective instruction for them so

that they could see it in action with their students. This served to strengthen the teachers'

confidence in the coach and in the beliefs and ideas that she was attempting to introduce into

their instructional practices. This trust was an essential element in the relationship between the

coach and the teachers as adult learners. Transformational Learning Theory articulates this need

of adult learners to formulate dependable beliefs about their experience while assessing the

contexts of these experiences and making decisions based on the resulting insights (Taylor &

Cranton, 2012). It was clear that the teachers were not willing to simply accept the ideologies of

the coach blindly and needed time and space to evaluate them against their current practices and

beliefs while observing the new practices in action with real students. This enabled them to

internally negotiate the learning and assimilate the new information into current evidence-based

practices to strengthen the instruction that they offer to students. In an effort to seek informed

agreement about their experiences, as outlined in Transformational Learning Theory, the teacher

participants engaged in daily discussion with their coach and grade level team teachers in an

effort to gain a type of permission or confirmation that the proposed changes would be beneficial

to students and accepted by administration. This developed a type of shared responsibility

between the colleagues who felt more comfortable with their practices if they were all in agreement of their use with the students.

Knowles's Adult Learning Theory theorizes that adult learners desire to know why they need to learn something (Knowles et al., 2005). All of the participants in this study felt a shared pressure to implement instruction that the administration at the school would approve of, with a strong demand to grow the reading achievement of the students. This provided them with a robust desire for the coach to lead them towards meeting those goals. Although the coach did describe several teachers throughout the school who were resistant to change, despite the pressure to do so, the teachers in this study understood that they had areas that they needed to improve. Through pressure from administration they felt it necessary to be able to show that they were doing everything possible to demonstrate progress with their students and eagerly accepted the help of the coach to fulfill this requirement. Teachers were clearly excited about the progress that they had made through their work with the coach, however there continued to be pressure and shared responsibility for rapid student growth. This pressure and shared responsibility served as a driving force for continued improvement.

Being charged with bringing about a transformation in student reading bonded the coach and teachers together and encouraged them to work collectively to address the difficulties of students who were performing below or well below grade level. Inglewood Elementary is a low performing school with the vast majority of students placed in this failing category based on state and local testing. Therefore, there was an increased push to make the changes necessary to turn the performance of students around and produce drastic improvements in their reading achievement. The study participants were all willing to try new activities and strategies if they were evidence-based and recommended by others to be effective. Ongoing discussions allowed

for changes to be made quickly during implementation in an effort to improve teacher instruction and make it as effective as possible for the particular students who were involved. This experiential learning and problem solving approach to learning are essential tenets of Knowles's Adult Learning Theory and were evident with the participants in this study as they worked together to make important changes.

To this end, the teacher participants felt that the information learned during coach embedded PD was of immediate value to their classroom practice, an important assumption of Knowles's Adult Learning Theory. The coach was able to look for instructional trends with the teachers and intervene at the point that would provide the highest yield for improvement in instruction. This enabled the teachers to see immediate improvement of instruction, enhancing their change in beliefs about the new strategies and their ability to augment their instruction. This ability to see immediate value in the coach embedded PD encouraged its repeated use whereby forming an enduring relationship focused on continual improvement of the instruction offered to students.

Implications for Practice

A major finding of this study was teacher reliance on the literacy coach as a sounding board for advice and ideas on a broad range of topics. Teacher participants identified immediate access to discussions with the coach as highly beneficial to changing their beliefs and practices. They communicated the belief that it would be difficult to form a relationship with an outside coach conducive to readily enacting change in the classroom, as an outside coach would be harder to access, would not have intimate knowledge of the teachers, their students, and the data, and may not have a feeling of the shared responsibility that they felt with their coach. Their discussions with an on-site coach were more productive as the teacher and coach did not need to

reestablish relationship, shared knowledge, or context each time and were able to quickly deal with the questions and issues at hand. These opportunities for discussions—both big and small—were more accurately targeted towards the needs of the teacher and students and thus allowed for instructional modifications to be made more quickly. Therefore, it is imperative that coaches be embedded at the school level and that open discussion be nurtured and maintained to produce the desired results.

This immediate access to the coach supports the idea of the cyclical nature of coaching interventions that reinforce the learning of new content and strategies for implementation through engagement in both explicit instruction and opportunities to practice teaching real students (Cohen et al., 2016; Hudson et al., 2021; Moats, 2009, 2014; Tortorelli et al., 2021). The reciprocal nature of this technical, pedagogical, and situational knowledge support that literacy coaches use as embedded PD provides the full package of proficiency that teachers must possess, as when one of these types of knowledge is missing or underdeveloped, the others will fail to thrive and hinder effective literacy learning opportunities for elementary students (Piasta et al., 2009; Tortorelli et al., 2021). School-based coaches are situated within the cycle of instructional implementation such that they are available during the crucial time when teachers have follow-up questions and need assistance. When the coach is missing from the cycle, the teacher is left to navigate the process of bringing the new skill or instructional practice under executive control without guidance or support. Therefore, the coach provides an integral piece to the implementation puzzle on the school level by contextualizing the PD and being available to provide differentiated follow-up assistance as needed by individual teachers.

Figure 3

Cyclical Nature of Coach Supported PD
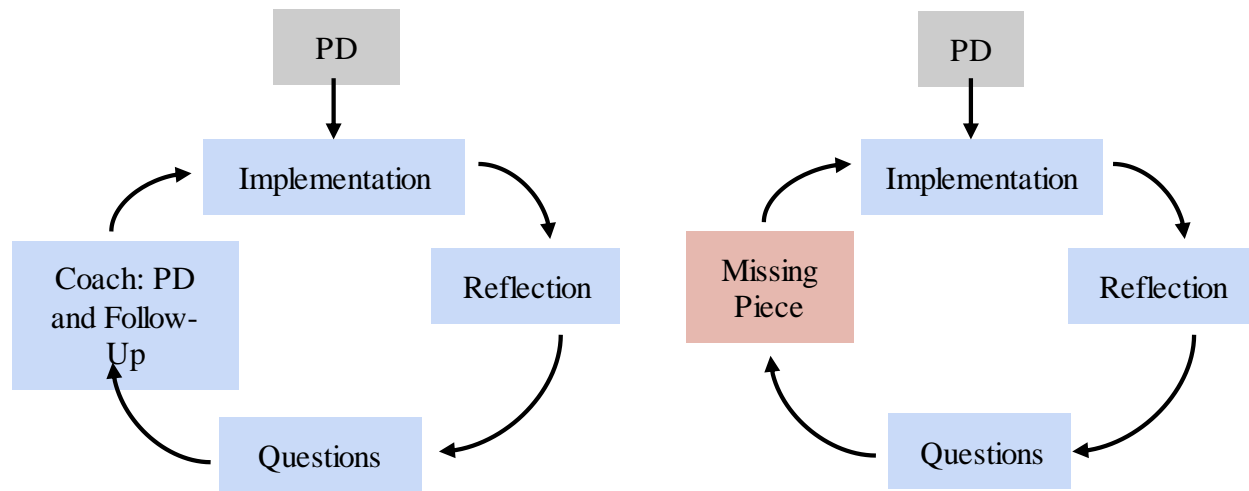
However, simply placing a coach on the school level does not guarantee the use of the coach as the sounding board that the teachers in this study found so effective. This can be accomplished when intentional strategies are put into place such as developing an atmosphere of trust and increasing coach accessibility with a substantial presence in the classroom setting. District leaders and school administration must prioritize the role of the coach and hold the coach's time with teachers sacred without choosing to pull them for other duties not related to improving teacher instruction and student reading achievement that would prevent them from being readily accessible for discussions with teachers.

The teachers in this study were clear about their need and desire to see instructional practices in action through modeling rather than simply hearing about it or reading about it during the unpacking of the content standards. They recognized that people may interpret written standards and lesson plans in different ways and appreciated the opportunities to see the coach bring the lesson to life thus allowing the classroom teachers to then better replicate the instruction with their own students. This theory to practice discourse is supported in the literature

on teacher professional development with scholars such as Neuman and Cunningham (2009) finding that PD containing a mix of content and pedagogical knowledge may best support literacy teachers as they work to apply literacy knowledge in practice. They noted that effective teaching occurs in practice, and therefore PD aimed at improving the instructional practices of literacy teachers must occur in the learning context of the actual teaching practices. As with opportunities for discussion, coaches must be given the time and space needed to engage in the modeling of effective instructional practices. Providing these services through on-site coaching allows for immediate follow-up coaching with the teachers to encourage the transfer of knowledge directly into classroom instruction. This support is crucial to extending the learning that was initiated during the modeling session and must be planned and implemented as a part of the professional development process provided by coaches. In fact, research suggests that when seeking to produce the largest effects on teachers' content knowledge levels, targeted training accompanied by practice under expert guidance is highly effective (Hindman et al., 2020; Hudson et al., 2021). Again, it is imperative that district leaders and school administration recognize the importance of allowing coaches the dedicated time commitment it takes for the extended coaching cycles that include modeling and follow-up observations with feedback rather than expecting a "quick fix" that would bring about the same results of improving teacher instruction and student reading achievement.

The findings of this study illustrate the fact that teachers want and need a mix of PD that gives them technical, pedagogical, and situational knowledge. They appeared to want clarification on what to teach, how to teach it, and the changes to make to directly meet the needs of their students. While widespread PD opportunities have continued to show privilege towards increasing technical knowledge, as this area is cheaper and easier to plan, implement, and

measure, this study makes it evident that real change comes from PD with the inclusion of an emphasis on pedagogical and situational knowledge. While it is critical that teachers have knowledge of the structure of the English language and insight into how students develop literacy and use these language structures while reading and writing, it is essential that they be provided with the tools of instructional practices that enable them to teach these concepts in developmentally appropriate ways (Cohen et al., 2016; Tortorelli et al., 2021). Research supports the theory that improving the content knowledge of teachers is not sufficient for demonstrating improvement in student outcomes (Gore et al., 2021; Kennedy, 2016). In fact, programs emphasizing pedagogy have been found to produce significant effects on student performance (Gore et al., 2021). However, Gore et al., (2020) contends that "the limited volume of research on the effects of pedagogy-focused PD has produced a self-perpetuating cycle; that is, research that has shown limited effectiveness of content-focused PD is often followed by a redoubling of efforts to refine content-focused PD" (p. 2). When discussing the changes that the coach helped generate in both beliefs and practices, the teachers pointed to PD that focused on implementation with students such as modeling and observations with feedback and asked for assistance making changes to better fit student needs. The familiarity that the coach had with students' data and a direct knowledge of specific teacher instructional needs allowed a deep focus on situational knowledge that dealt with knowing how different students were responding to the different approaches tried by teachers and modifications to make in response. Scholars cite pedagogical and situational knowledge as supportive of adaptive and flexible literacy instruction and more representative of a depth of knowledge aligned with changing teacher instructional practices to improve student reading instruction (Hindman et al., 2020; Tortorelli et al., 2021). Therefore, it is imperative that PD for literacy teachers continues to move in the direction where all three

types of knowledge are targeted for enhancement and are strengthened through a mutually sustaining cycle.

When the focus is on technical, pedagogical, and situational knowledge, all within the same coaching cycles, teachers are given the expertise in what to teach, how to teach it, and how to make changes based on their individual students that they desire. Again, it is imperative that all stakeholders understand the importance of providing dedicated time for the coach to engage in these advanced PD interventions with the understanding that changing instructional practices takes time. Through an investment of dedicated time by the coach, this study provides evidence for the positive outcomes that can result from this focus on technical, pedagogical, and situational knowledge on both teacher instruction and possibly student reading achievement.

The three teacher participants in this study all had very distinct needs relating to the effectiveness of their current instruction, the area of concern with their literacy teaching, and their preferred learning style. Therefore, it is crucial that coach instruction be differentiated for teachers in order to provide targeted, explicit professional development that is geared directly towards the needs of the teacher and the students that the teacher instructs. As with students, coaching instruction is highly beneficial when it is targeted to teacher needs thereby encouraging advanced engagement and continued buy-in. Through differentiated PD, teachers are better able to see the need for the coaching interventions which allows growth and change to happen at exactly the necessary time and place to provide the highest yields possible. While being highly effective, this type of professional development is arguably more time consuming and often requires complex planning and organizational methods. Therefore, it is vital that district leaders and school administrators provide the time and resources necessary for coaches to implement

highly effective, differentiated PD that has the potential for making change surrounding literacy instruction.

In review, coaches must be accessible on the school level for daily, open discussions, opportunities to model instructional techniques, and the essential follow-up interventions necessary for the transfer of learning from PD to classroom instruction. It has become clear that coaching time must be prioritized with the majority of time each day being devoted to these important tasks. Support from district leaders and school administration is imperative if coaches are to devote the time and energy needed to engage in the advanced coaching interventions that this study suggests show promise in exacting a change in teacher beliefs and practices.

Limitations

The scope of this research held several limitations. This study used a small sample size with the perspective of only one coach being observed and examined. This limited the findings to the coaching strategies, conversations, and interactions of one coach and three of the teachers she worked with, making it difficult to ascertain if these same findings would be found in any other circumstance. The small sample size and research setting based on convenience mean that the experiences as described by these participants are not necessarily representative of others. However, the qualitative nature of this case study provided the opportunity for a deep investigation that produced rich descriptions and understandings of the interactions between the coach and the teachers. This offered extensive knowledge of the nuances of the coach/teacher relationship and furnished rich data detailing the impact these interactions had on the participants. Therefore, while the research was limited to one coach and three teachers, the small sample size allowed for complex data to be collected that offered a comprehensive look into how literacy coaches change the beliefs and practices of classroom literacy teachers.

Another limitation in this study was the disparities in teacher/coach educational experiences prior to the study. It is difficult to gauge differences in teacher prior experiences which may attribute to the ability of some teachers to make changes more quickly than others. Differences in teacher personalities may also offer an explanation of why some teachers change and others may not. It is also possible that there are differences across grade levels, whereby a coach may be more successful with teachers on certain levels rather than others.

Another limitation of this study was the relatively short time span for data collection. This did not allow for the ability to record longitudinal changes in the beliefs and practices of the teachers and was simply a measure of the changes taking place during data collection or in the distant past as remembered and reported by the teachers and coach. This limited the ability to document and examine changes that had been made during pre-service preparation and the beginning years of classroom teaching experience. Also, the time of data collection being near the end of the school year (March-June) may have impacted the data collected. The teachers and coach had professional development experiences from the entire school year that were available for discussion and consideration. This may be seen as a positive factor, allowing for participants to pull from a greater pool of PD sessions and possible changes, or a negative factor in which the changes in beliefs and practices appear more substantive than reasonable during the short data collection time period.

It should be noted that the teachers in this study were open to engaging in intensive professional development interventions with the coach and were receptive to changing their beliefs and practices involving reading instruction. This may not be representative of how the coach/teacher relationship works in all cases. However, this study shows the way change can happen, with all willing participants, as the purpose was to illustrate the ways a coach can exact

change, not to examine how a teacher's willingness to change impacted the relationship and results. Therefore, while possibly being viewed as a limitation to the study, the sincerity of the participants may be recognized as an advantage to gaining insight into how coaches can enact change with literacy teachers.

Finally, it is important to acknowledge the time of the study being situated during the school year when the participants and students were returning to school following the COVID-19 pandemic. Prior to the 2021-2022 school year, when this study was conducted, the Wildwood School District was engaged in remote learning followed by a mix of remote and in person instruction. During this time, professional development opportunities and student instruction were often disjointed, completed online, and frequently centered around digital resources and strategies. The lasting impacts remote learning has had on teaching and learning for students and teachers is difficult to determine at this time and may have influenced the findings of this study.

Recommendations for Future Research

This study examined how an elementary school-based literacy coach, administering embedded PD to teachers who provide reading instruction, possibly changed the beliefs and practices of those literacy teachers. Additionally, the ways that these coach/teacher professional development activities aligned with current theories of adult learning were investigated. An expanded study that includes additional cases, including a greater number of literacy coaches, would provide further information surrounding coaching practices implemented at different schools in this district, and in other districts, to determine if the findings in this study are representative of what is occurring in schools across the southeastern United States. As this study used only one literacy coach with three of her teachers, it is unclear whether teachers in other schools are receiving the same PD opportunities, aligned with adult learning theory, and

experiencing the same positive results through a very close relationship with their coach. This study documented a coaching relationship in which the coach was providing the interventions that the teachers themselves found effective for their learning styles and as a result they were open to the new learning and experienced a change in instructional beliefs and practices as a result. A study with a larger sample size would help determine if these results are similar to the literacy coaching opportunities offered at other schools or if other more effective coaching strategies are being used elsewhere.

Another future research study could put a clearer focus on documenting the coaching interventions used with teachers in a more formal way such as through the use of a coaching log. This would put a finer point on the strategies used, the immediate impact those strategies had on teacher instruction on a daily basis, and provide a clearer picture on the percentages of time the coach is spending with each teacher and each individual strategy. This study focused on asking participants to provide a narrative of their work together and changes that they may have experienced. A future research study could ask participants to provide written documentation of when, where, and what professional development was given and immediate, evidenced changes that occurred as a result. This would provide further evidence of the coaching strategies that are most effective in bringing about change as well as more specific information about how the teacher implemented those changes on a minute, hourly, and daily basis.

Additionally, several specific topics for future research emerged from the findings of this study that are in need of more investigation. Available research on the nuances of a shared responsibility and shared accountability of the coach and teachers and the impact that this has on the teaching and learning context has been limited. This area has the potential to influence the coach/teacher relationship and the work that they do in countless ways depending on such things

as the attitude of administration, reading achievement status of the students, and pressure at the state level due to a possible persistent failing school status. Therefore, future research focused on these perceptions is needed to inform PD that supports this theory. Also, this study uncovered the ways that a coach adjusts instructional PD to provide the teacher with coaching interventions geared towards bolstering the exact area of reading instruction in which the teacher is struggling. Research into the need and ability of the coach to differentiate PD for teachers is an important concept that would offer rich data to inform a model of coaching designed to meet the specific requirements of each teacher.

Possible future research could also be focused on more formally documenting possible student reading gains alongside the teacher self-reports of a change in their instruction and student growth in reading achievement. The teachers in this study noted changes in their student reading achievement through their change in beliefs and practices as a result of their work with the literacy coach. Teachers were not asked to provide evidence of student gains in reading tied to their instructional changes. This student growth could be officially tracked in an attempt to further substantiate the promise of literacy coaching as a resource in raising student reading achievement. A link between the coach/teacher/student working relationship and the specific improvements in student reading achievement that may be documented would serve to bolster the confidence in literacy coaching as an influential way to bring about the change in elementary reading achievement that has been desired for decades.

Summary

The coach and teachers in this study explained and demonstrated their experiences with coach-based literacy professional development activities on the school level. They shared the changes that they experienced through the process and what they felt directed those shifts in

beliefs and transformation of practice. Several findings emerged from the study including the coach's ability to guide teachers towards instructional practices that are explicit, targeted, and intentional with a collective cohesion formed in the classroom, across the grade level, and within the whole school. A shared responsibility between the coach and teachers developed through the embedded nature of the coach position and teacher participants benefited from having the coach available for use as a sounding board when seeking guidance for changes in instructional beliefs and practices. Specific coaching interventions that were identified as being particularly impactful were coaching discussions, coach modeling, observations with feedback, and co-planning opportunities with the coach. The school-based nature of the coach allowed the time and space needed for the coach to engage in the comprehensive, scaffolded coaching cycles necessary to bring about the changes in literacy teacher reading instructional practices necessary to ensure quality instruction for students. With that said, it was noted that the coach was often not able to fully engage in these extensive coaching strategies due to additional requirements on her time not related to coaching. Therefore, it is essential for district leaders and school administrators to establish clear intentions for the coaching role, put resources in place to fully sustain the role, and preserve the time needed for the coach to be fully immersed in the direct work with teachers necessary to ensure the use of evidence-based practices in reading instruction for students. Literacy coaching holds significant promise in improving teacher technical knowledge, providing the support needed for transfer of knowledge into the classroom, and the ability to target that instruction to the specific needs of individual students. Valuing the work coaches do should be considered by all stakeholders when designing professional development meant to improve the instruction of literacy teachers with the goal of improving student reading achievement.

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Appendix A: Participant Recruitment Letter

1/22/22

Re: Investigating the Influence of Literacy Coaching as Embedded PD on Teacher Instruction

Dear _____:

I am writing to let you know about an opportunity to participate in a voluntary research study investigating how literacy coaches can influence the teaching beliefs and practices of literacy teachers. This study is being conducted by Katherine Mauzy at the University of North Carolina at Charlotte.

Your participation would involve three brief Google Surveys and three individual interviews spread out over a three month period. This would equate to one brief survey and one interview per month during the months of March, April, and May. Observations of at least three PD sessions are required. Monthly classroom observations will also be completed during the study. You would be asked to commit to participation from March-June to allow you to see the information collected at the end of participation.

To be eligible for participation in this study you must either provide school-based PD to elementary teachers on a daily or weekly basis (coach) or receive school-based PD from a literacy coach on a daily or weekly basis (teachers). Teacher participants should be able to provide specific information on the interventions received from literacy coaches with firsthand accounts of how they have implemented the information into their classroom instruction or potentially modified their philosophical beliefs and/or teaching practices based on the interactions with the coach. Literacy coach participants are required to provide professional development to elementary classroom teachers on a daily or weekly basis and be willing to articulate the interventions used, the ways that teacher change is measured if applicable, and coach perceived changes in teacher practice.

You can expect that research procedures will minimize any risk to you and will maximize confidentiality.If you would like additional information about this study or are interested in participating, please contact me at (704)224-7613 or kjmauzy@wsfcs.k12.nc.us.

Thank you for your consideration, and once again, please do not hesitate to contact me if you are interested in learning more about this Institutional Review Board approved project.

Katherine Mauzy

Principal Investigator

University of North Carolina at Charlotte

Appendix B: Informed Consent Letter

TITLE OF STUDY

Investigating the Influence of Literacy Coaching as Embedded PD on Teacher Instruction

PRINCIPAL INVESTIGATOR

Katherine Mauzy

University of North Carolina at Charlotte

(704)224-7613

kjmauzy@wsfcs.k12.nc.us

PURPOSE OF STUDY

You are being asked to take part in a research study. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please read the following information carefully. Please ask the researcher if there is anything that is not clear or if you need more information.

The purpose of this study is to examine the ways in which job-embedded professional development through literacy coaching influences teacher beliefs and practices.

STUDY PROCEDURES

Late March (pending IRB approval)	Coach Interview #1
	Observation of PD Session
	Teacher 1 Interview #1
	Teacher 2 Interview #1
	Teacher 3 Interview #1
	Google Survey #1
	Classroom Observations*

April	Coach Interview #2
	Observation of PD Session
	Teacher 1 Interview #2
	Teacher 2 Interview #2
	Teacher 3 Interview #2
	Google Survey #2
	Classroom Observations*

May	Coach Interview #3
	Observation of PD Session
	Teacher 1 Interview #3
	Teacher 2 Interview #3
	Teacher 3 Interview #3
	Google Survey #3
	Classroom Observations*

If permission is granted, interviews will be audiotaped to allow for accurate transcribing of information.

RISKS

There are no foreseen risks with participation in this study. You may decline to answer any or all questions and you may terminate your involvement at any time if you choose.

BENEFITS

There will be no direct benefit to you for your participation in this study. However, the information obtained from this study will allow us to better understand the coaching interventions that support teachers to improve literacy instructional practices in an effort to raise student reading achievement.

CONFIDENTIALITY

Participant data will be kept confidential except in cases where the researcher is legally obligated to report specific incidents. These incidents include, but may not be limited to, incidents of abuse and suicide risk.

For the purposes of this research study, your comments will not be anonymous. However, every effort will be made by the researcher to preserve your confidentiality including the following:

Assigning code names/numbers for participants that will be used on all research notes and documents

Keeping notes, interview transcriptions, and any other identifying participant information in a locked file cabinet in the personal possession of the researcher.

CONTACT INFORMATION

If you have questions at any time about this study, or you experience adverse effects as the result of participating in this study, you may contact the researcher whose contact information is provided on the first page.

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary. It is up to you to decide whether or not to take part in this study. If you decide to take part in this study, you will be asked to sign a consent form. After you sign the consent form, you are still free to withdraw at any time without giving a reason. Withdrawing from this study will not affect the relationship you have, if any, with the researcher. If you withdraw from the study before data collection is completed, your data will be returned to you or destroyed.

_____

CONSENT

I have read and I understand the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I understand that I will be given a copy of this consent form. I voluntarily agree to take part in this study.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____

Appendix C: Interview Protocol

This is a semi-structured qualitative interview aimed at identifying how teachers perceive a change in their instructional behaviors after intervention with a reading coach and what factors influenced the perceived change. Reading coaches and classroom teachers will both be interviewed in order to gain the perspectives of both sides of the coach/teacher relationship in order to formulate a standard protocol of coaching to improve teacher instruction.

Hello! My name is Katherine Mauzy and I am very happy to be here with you today. Like you, I have spent time working as a (classroom teacher or literacy coach), and I have always been interested in the relationship between the two positions. I would like to find out the best practices in positively influencing teacher instruction in order to improve student achievement and success. My goal is to provide a framework for schools to use that would strengthen the coach/teacher relationship and provide specific strategies for coaches to use that teachers report as effective in improving their instruction.

Literacy Coach Interview Questions:

Warm up questions:
1. Tell me a little about your professional background.
2. What makes you excited to come to work each day?

General Elements of Coaching:
3. How would you define the role of the literacy coach?
4. What is a typical day like for you as a literacy coach?
5. As a coach, how do you develop trust with teachers?
6. What is the role of data in the work of a coach?
7. What questions do teachers ask you?
8. What questions do you wish they would ask?

Specific Coaching Strategies:
9. In your opinion, what areas do elementary teachers struggle with in their teaching practice?
10. What coaching interventions do you implement with teachers?
11. What interventions does the district prefer you spend your time on?
12. What interventions does your principal recommend you implement with teachers?
13. How have the instructional beliefs and practices of your teachers changed?
14. Which coaching interventions do you feel have the biggest impact on changing teacher instruction?
15. What do teachers report as the coaching interventions that have the biggest impact on changing their classroom instruction?
16. What classroom teaching strategies do you feel make the biggest impact on student literacy achievement?
17. What strategies do you implement with teachers who are resistant to change?

Reflections:

18. What have you learned through your role as the reading coach?
19. How do you personally measure your overall success?

Suggestions for Change:
20. How can we improve the classroom instruction that students receive?

Follow-Up Questions for Interviews #2 & #3:
1. What professional development have you provided to teachers recently?
2. What questions did the teachers have for you?
3. What support did the teachers ask for following the PD interaction?
4. Describe the support that you provided following the PD.
5. What evidence of changes in teacher beliefs did you observe or hear about?
6. What evidence of changes in teacher instructional practices did you observe or hear about?

Classroom Teacher Interview Questions:

Warm up questions:
1. Tell me a little about your professional background.
2. What makes you excited to come to work each day?

General Elements of Teaching:
3. What classroom teaching strategies do you feel make the biggest impact on student literacy achievement?
4. What areas do you feel you struggle most with in your teaching practice?

Specific Coach/Teacher Interactions:
5. Describe your relationship with your literacy coach.
6. Describe the ways your literacy coach works to improve your teaching practices.
7. What are some ways that your instructional beliefs and practices have changed?
8. What intervention by the reading coach has changed your teaching practices and/or beliefs the most?
9. *How do observations with feedback by the coach influence your teaching practices?*
10. *How does lesson modeling by the coach influence your teaching practices?*
11. *How does professional development given by the coach influence your teaching practices?*
12. *How does co-planning with the coach influence your teaching practices?*
13. *How does co-teaching with the coach influence your teaching practices?*
14. *How does data analysis with the coach influence your teaching practices?*
15. What did the coach specifically do that had the most effect on your teaching?

Reflections:
16. What elements of your teaching have changed through intervention with the coach?
17. How did it influence your teaching practices and beliefs?

Suggestions For Change:

18. What would you like your literacy coach to do differently?
19. What key strategies do you feel can bring about a change in teacher instruction?
20. How can we improve the classroom instruction that students receive?

Follow-Up Questions for Interviews #2 & #3:
1. What professional development has your coach provided to you recently?
2. What questions did you ask the coach?
3. What support did you ask for following the PD interaction?
4. Describe the support that the literacy coach provided.
5. In what ways have you experienced changes in your beliefs following the PD?
6. In what ways have you experienced changes in your instructional practices following the PD?

Appendix D: Field Notes Templates
Classroom Observation

Date/Time: **Site/Location:**

Length of Observation: **Participants:**

Reading Instruction Observed (explain in detail):

Description of Events:

Researcher Questions for Further Investigation

Field Notes Templates
PD Observation

Date/Time: **Site/Location:**

Length of Observation: **Participants:**

PD Activity Observed (explain in detail):

Description of Events:

Questions Teachers Ask:

Researcher Questions for Further Investigation:

Appendix E: Google Survey

Literacy Coaching Survey

kjmauzy@wsfcs.k12.nc.us Switch account

Your email will be recorded when you submit this form

* Required

Have you participated in professional development with the coach/teachers (informal or informal) in the last two weeks? *

○ Yes

○ No

What coaching strategies were utilized? *

☐ PD group presentation

☐ coach modeling

☐ coach/teacher conferencing

☐ analyzing student data

☐ analyzing student work samples

☐ observations with feedback

☐ observations

☐ co-planning

☐ co-teaching

☐ none

☐ Other:

Did you make any changes to your instructional beliefs as a result? Explain. *

Your answer

Did you make any changes to your instructional practices as a result? Explain. *

Your answer

Share any other information that you think might be helpful.

Your answer

Submit   Clear form

Appendix F: Code Book

Code	Description	Examples
Clarification	Making an idea or statement clear	"We did get a lot of clarification on like Heggerty and how exactly to do it this year." "I find myself wanting a little clarification. Sometimes the standard feels really broad and I'm not sure exactly how to, like, dial in on it and teach what I need to." "She'll take the time to investigate it and then she'll let us know what she finds out." "Wondering if I was doing things the way I was supposed to."
Coaching cycle	Data discussions to inform co-planning, instructional implementation, observation with feedback, follow up	"I'm learning that I should probably model the lesson first. Then maybe help them preparing the lesson and prep the lesson and then having them to teach the lesson." "So just getting in that cycle and having the time to do all three things with the teachers." "You're looking at a three part cycle." "Meet with the teacher, see what that looks like and then get into your cycle of, you know, discuss it and reflect on what you are doing that's not working. Let's go from there and let's refine it."
Cohesion	Unity of beliefs and practices across groups of teachers	"Our whole team is on the same page." "They know what everybody should be doing. They can make sure they're just doing it." "Make

		sure that you're doing it right in comparison to other teachers." "She gives us a lot of guidance on like what we should be doing. I feel like they make sure we're all on the same page." "We're working together to make sure that we're doing things that they enjoy and that are going to benefit them." "It helps us all stay on the same page." "They just didn't know how to tie it all together."
Confidence	Belief in oneself and one's abilities	"Helping the teachers become, you know, more confident in what they're doing with their methods and strategies that they're using." "I think it's definitely made me more confident in, like, teaching literacy." "Working with a coach has made me feel better about that." "This was the first year that I felt like I was giving them exactly what they needed."
Correction	Something that is substituted for something that is wrong	"The hand motions were wrong because I'd never seen how they were supposed to be." " I used to try to make it take more time, like, I would like not overcorrect, but if they got it wrong like we would really go over it." "I've done better making sure, like, we don't look at anything. We don't write anything, it's all just oral." "Just simple things like that. They're easy fixes but they need to be fixed."
Co-planning	Coach and teacher mapping out plan for instruction	"I did like a draft I guess of like a week's lesson plans for

	together as informed by data	small group and she kind of gave me some feedback on that so that I had a plan ready." "Based off of seeing how she would plan, then I was better able to plan myself." "Showing more like actually like what specifics she put into her plans."
Discussions	All along a continuum including hallway chats, email conversations, PLT group discussions, grade level meeting conversations	"Talking about the kids and what's growing, who's growing, what's working, what's not working. So talking to my team has really helped me." "Talking to her about what she's doing with her low kids and seeing what I can do and use with my lower students." "I think with permission I kind of think of PLT discussion." "We talked about things in PLT and then we took it back to planning."
Explicit phonics (absorbed explicit)	systematic and sequential teaching of the letter-sound relationships in written English that allow readers to decode words	"So we are way more heavy on the decoding and the phonics piece." "The pattern is in the text, the pattern is in the decodable, the pattern is in everything." "Being able to do the phonics that they need." "CVC words for phonics. We can focus on that." "So we've really gotten into the decodable model from LETRS." "You're reading the individual words with the patterns." "I've reviewed the phonics strategies we're doing for the week and the spelling patterns."
Explicit phonemic awareness (absorbed explicit)	Systematic and sequential teaching of the ability to	"Whole group I think the phonemic awareness and

	recognize and manipulate the spoken parts of sentences and words	Heggerty has helped so much." "They really push a lot of Heggerty and a lot of phonemic awareness for these lower kids." "I do a few minutes of Heggerty and then a few minutes of that intervention to try to go back over the standards."
Formal PD	Whole group, structured, centered around a specific topic geared towards general knowledge	"She gave us a PD during PLT where she gave us a Powerpoint." "We've had PD about, like, how to assign lessons on I-Ready." "LETRS training talks a lot about that so that kind of all happens at the same time." "Two classes that were really focused on reading." "I've done a few very small grade level PD's early on." "I did a little bit of PD in second grade with changing how the small group instruction looks."
Follow-up	Checking in by the coach to get an update from the teacher on progress, questions, further assistance needed	"Follow back up with that and do that as often as needed." "Talk, go back in and touch base with teachers again."
Modeling	Coach demonstrates quality instructional implementation	"I went in and watched her a couple times." "Seeing like different ways to teach phonics." "Listening to videos." "Having the opportunity to watch her and then just talking and modeling for each other." "I have shared a lot of those videos in hopes that, you know, just watch it on your own time, this is what it looks like." "This is what your piece is going to look like."

Modify (absorbed change code)	Change an instructional belief or practice	"What is another way I can try to get this point across or try to teach the skill?" "What can I add to it to make it more challenging for them?" "How do I make it more appropriate for them?" "I can go down a grade level." "I think that's something we need to tweak in the classroom." "I had to kind of change that mindset.", "You could also do it this way."
Observation with feedback	Coach observes teacher implementing instruction and provides an informal analysis with constructive criticism	"Just sitting in the back and watching her do that." "She's come in and watched me." "She thought I did a good job but she was kinda like okay you come watch me and see how I do it." "Her coming and watching me and giving feedback."
Permission (absorbed approval)	Authorization given to do something	"I just want to make sure what I'm doing is okay, or like just want to run a change past her just to make sure that there's not a reason that I can't change it." "I kind of think of PLT discussions and like just kind of getting their permission to, like, branch out and teach it like a different way, like a different way that I think is gonna work best for my students." "Kind of like approval in a way." "Making sure I can make changes. I would rather talk about it before we make changes." "You have to make sure you're within the guidelines."
Practice	Habitual performance to rehearse instructional	"Practice a few times. Watch this quick video. Make sure

	strategies	you got it correct." "Practice on whatever it was that we identified as a weakness." "Just practicing and making sure that it's the correct sound."
Preparation	Measures taken to get ready for instructional implementation	"Prepare, prepare your words ahead of time that you're going to use in your lesson or your dictation sentences." "This is what this is going to look like. You know, I'm going to say this word." "She was very prepared. She had everything she needed."
Questions (absorbed advice code)	Inquiries teacher made of the coach pertaining to classroom procedures, classroom management, instructional beliefs and practices	"We don't always know what to do about it." "Some of them reached out about their phonics time through Wonders." "We would be doing a lot of Wonders questions because you know there's so much information in Wonders." "Anytime you pose a question to someone it should spark some type of thinking." "The most questions have probably been through small group reading."
Reflection	Considering thoughts about past events	"Reflect on what, the what are you doing? What's working, what's not working?" "This is what I think went well, you know, what we need to work on." "You can also learn a lot from yourself if you're looking for it. You know, you've got to be looking for it." "Would you be as reflective if someone wasn't there and we weren't working through these things together?"

Resource sharing	Strategies, materials, and informational resources coach provided to teacher	"I'll go in and prepare those passages for them and get that to them." "I just prepare that for them every week and I'll send that to them and have it ready for them." "Making sure they have the appropriate materials." "I think materials is a big thing of just having access to what's appropriate." "What kind of materials do I use and what's appropriate? What can I use?" "sharing ideas"
Sequencing	Order of succession of events in lesson implementation or within the quarterly pacing guide	"What would make the logical order? Like what is the order we are going to teach it in?" "We kind of sat down and mapped that out last year." "They wanted to know what that layouts [is] going to look like." "Like a layout or a framework of okay we're going to really hone in on these skills and then you know progress to these." "Follow the sequence of whatever program we're using."
Support (absorbed relationship)	To hold up and serve as a foundation for the teacher and instructional beliefs and practices	"I'm just here to support you in any way I can." "This year I've tried to play my hand at just being a support person." "We still have to kind of coddle, show, and then support a lot." "I'm here to work with you. I'm your team member"
Systematic	Arranged according to a planned system or method	"Go from learning letters to learning words, from learning words to be able to read the decodables and then going into deeper text." "So we

		looked at a guideline for our planning." "I mean that's really like making a plan and having a system." "So it's kind of procedural like getting into the routine of doing it." "Systematic because it was, you know, same order of activity everyday."
Targeted (absorbed intentional)	Directed towards a specific goal	"What are the specific skills that students seem to struggle with and so that kind of guides small group instruction." "You can use this with your lowest group or you use this with your medium group." "This is the text you use for these kids." "I think it's a little more challenging for people to make sure that this child is reading on the right level." "But the groups that I'm working with are the lowest groups." "Now what strategies are we going to use to do that?"
Teaching to the standard	Unpacking the standards required for the grade level, teaching the program or strategy with fidelity	"What skills is this standard asking us to teach?" "A lot of the coaching can help, like, making sure you clearly understand the standard that you're supposed to be teaching." "I think we've done more like unpacking standards this year so that we make sure we are, like, explicitly touching on exactly what the standard is instead of just maybe, like, kind of getting around it or teaching close to it."
Trends	Patterns of teaching behaviors	"Things that I pick up on

	occurring in multiple classrooms to be addressed by the coach	when I do my walk throughs and pick up on small things." "There was a pattern that I picked up on so I'm thinking that's going to lead into a PD at some point." "If I see it in one classroom then I might see it in another classroom. So then you know signals start to go off. Okay, maybe that's something you touch on." "Out of four classes, two out of the four foundational lessons we saw had the same problem." "I think it's a pattern across the board."

Coach

The coach provides targeted (22) practice (32), preparation (26), and correction (23)
Through
modeling (37), co-planning (32), discussions (26), and analyzing student data (21)
Focused on
Change (16)

Participant #2 (Morgan)

The coach helps make small group phonics instruction become targeted (16), intentional (16), explicit (15), and systematic (11)
Through
Discussions (30), co-planning (22), and modeling (17)
Focused on
Lesson sequencing (18), lesson pacing (11), and cohesion (11)

Participant changed beliefs, knowledge, and practices surrounding small group reading content and format

Am I teaching the right things in the right way?

Participant #3 (Bautista)

The coach provides correction (7) and clarification (6)
Through
Modeling (19), discussions (17), and observations with feedback (10)
Focused on
Teaching to the standard (8)

Participant changed beliefs, knowledge, and practices surrounding Heggerty phonemic awareness instruction

Am I teaching it right?

Participant #4 (Rosela)

The coach helps make small group reading instruction become targeted (30) and intentional (17)
Through
Discussions (36), co-planning (26), modeling (18), and observations with feedback (12)
Focused on
Analyzing student data (12) and lesson pacing (11)

Participant changed beliefs, knowledge, and practices surrounding small group reading content and format

Am I teaching the right things in the right way?